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ON THE VALUE OF HUMANISTIC, PARTICULARLY CLASSICAL,
STUDIES: THE CLASSICS AND THE NEW EDUCATION

III. THE CASE FOR THE CLASSICS

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No subject is too stale for a "rattling speech," and the mere praise of the classics and the exposure of the adversary still supply good matter of rhetoric.¹ But this paper is to be printed, and I hope with the aid of foot-notes to make it a sufficient, though of course not exhaustive, historical résumé and a repertory of temperate arguments adapted to present conditions.² To this end I am prepared to sacrifice not only its temporary effect on an audience but any ambition I might feel to attain the symmetry and classicism of form which befit a classicist speaking in his own cause and which are so admirably illustrated in the apologies for classical studies of Mill and Jebb and Arnold.³

¹ Cf. Professor Forman's *Humble Apology for Greek*, Cornell University, 1904, printed privately.

² Cf. *infra*, pp. 600-1. Even in 1868 Professor Gildersleeve had to make the same point (*Essays and Studies*, 5: "Dr. Bigelow is fighting the shadows of the past," etc.—*Ibid.*, 10).

³ Mill, "Inaugural Address," *Dissertations and Discussions*, IV, 332 ff.; Jebb, *Essays and Addresses*, 506 ff.; *Humanism in Education*, 545 ff.; *Present Tendencies in Classical Studies*, 560 ff., 609 ff., 636; Arnold, "Literature and Science," *Discourses in America*, 172 ff. To these might be added Lowell's "Harvard

The situation has improved since I had the honor of speaking here fifteen or sixteen years ago, and many topics which I dwelt on then may be lightly enumerated today. The wearisome controversy has educated the participants on both sides.⁴ Both are more careful in their dialectic and more cautious in the abuse of exaggeration and irrelevancy.⁵ Our opponents have grown very shy of the kind of logic which delivered them into our hands, though they still grotesquely misconceive the nature and aims of our teaching.⁶ But only a few incorrigibles still harp on the false antithesis of words and things.⁷ The recollection of Lowell's eloquent protest (VI, 174) if nothing else would make them eschew the precious argu-

Anniversary Address," *Prose Works*, VI, 139, 160, 165: "Oblivion looks in the face of the Grecian Muse only to forget her errand," 166, 174; and *Latest Lit. Essays*, 139, the speech in which the greatest professor of modern languages told the Modern Language Association: "I hold this evening a brief for the modern languages and am bound to put the case in as fair a light as I conscientiously can." See the fine chapter on "Reading" in Thoreau's *Walden*. And for further bibliography of books and papers referred to in this address cf. *infra*, pp. 591, 587, 599.

⁴ Huxley (*Science and Education*, 83) stretched "nature" to include "men and their ways," and Arnold with more justice made "letters" include Copernicus and Darwin (their results, not their processes).

⁵ Huxley, *op. cit.*, 163; Jebb, *op. cit.*, 537. No rational advocate would now recommend either Latin or botany on the ground that it *exercises the memory*. See Gildersleeve, *op. cit.*, 28.

⁶ Cf. President David Starr Jordan, *Pop. Sci. Mo.*, 73 (1908), p. 28: "Once the student cuts entirely loose from real objects and spends his days among dialectical marks, irregular conjugations, and distinctions without difference his orientation is lost." So Tyndall once demanded "a culture which shall embrace something more than declensions and conjugations." What would President Jordan think of a classicist who characterized the study of science as cutting loose from human interests and counting fish-scales? See Zielinski's rebuke of Father Petroff, p. 200-1; Lowe, "Speech at Edinburgh," November 1, 1867: "We find a statement in Thucydides or Cornelius Nepos who wrote 500 years after and we never are instructed that the statement of the latter is not quite as good as the former. . . . The study of the dead languages precludes the inquiring habit of mind which measures probabilities" [*sic*]. Cf. *infra*, pp. 594-97.

⁷ Lowe at Edinburgh, November, 1867; Spencer, *passim*; Jordan, *Pop. Sci. Mo.*, 73 (1908), p. 29; cf. Youmans, 5, "The relation between words . . . and ideas . . . is accidental and arbitrary." Cf. *contra* Masson *apud* Taylor, p. 306; Mill, 347-8.

ment of Herbert Spencer and Lowe that Greece was such a little country, "no bigger than an English county." Some of them are beginning to apprehend the distinction between education and instruction, formation and information.⁸ And if any of them still believe that the intrinsic excellence of classical literature is a superstition of pedants they rarely venture to say so in public in the fearless old fashion of the *Popular Science Monthly*.⁹ We have won a victory at the bar of educated opinion in which we may feel some complacency, though we must beware of overestimating its practical significance. The man in the street has not changed his opinion of dead languages, and the great drift of American education and life toward absorption in the fascinating spectacle of the present has not been, perhaps cannot be, checked. A stream of tendency cannot be dammed by argument. As Professor James says: "Round your obstacle flows the water and gets there all the same."¹⁰ The majority still believe that modern civilization can find not only entertainment but also all the instruction and all the culture which it requires in the contemplation of moving pictures of itself whether in the five-cent theater or the ten-cent magazine or the one-cent newspaper. But among the thoughtful there is a reaction in our favor. They may not accept our estimates of the transcendental worth of the classic literatures or the unique discipline of classical studies. But they have lost forever the illusion that the mere suppression of Greek and Latin will bring in the educational

⁸ Gildersleeve, *Essays and Studies*, 13; Zielinski, 28; Brunetière, *Questions Actuelles*, 51 ff., 62, 74-75, 404-5.

⁹ 23, 701: "The Dead Language Superstition," a diatribe called forth by Mill's "Inaugural." See in like strain Mach, *Open Court*, November 22, 1894; Bierbower, "Passing of the Linguist," *N. E. Magazine*, n.s. 36, 246 ff.

¹⁰ For an effective answer to this fatalistic *vox populi vox Dei* argument, see Zielinski, *Our Debt to Antiquity* (Eng. trans., E. P. Dutton), 3-8; cf. Lowell, "Harvard Anniversary Address," *Works*, VI, 162: "I have seen several spirits of the age in my time," etc. Paulsen (II, 370) says that in 1770 Kant would never have foreseen that in 1820 Greek would lead science in the schools. Yet he himself ventures the prediction that a third renaissance of classics will never come (pp. 634-35).

millennium.¹¹ They are observing with mixed feelings a Greekless generation of graduates and wondering what a Latinless generation will be like. They admit with some natural reserves the breakdown of the elective system.¹² They recognize that a real education must be based on a serious, consecutive, progressive study of something definite, teachable, and hard.¹³ And while they may not agree with us that no good substitutes for Greek and Latin and the exact sciences can be found, they are not quite so certain as they were that sociology, household administration, modern English fiction, short stories as a mode of thinking, and modern French and German comedies are "equally as good." Thirty or fifty years ago they could contrast with our ideal the actual results of that classical training for which we claimed so much.¹⁴ It is now our turn to challenge the results of the new system.¹⁵

Addressing myself to a generation thus chastened in spirit and exercised in the dialectics of educational controversy, I need not do more than enumerate some of the hoary fallacies and irrelevancies which it was once necessary to refute in detail. I may take it for granted that we must compare either ideals with ideals or actualities with actualities; that from the standpoint of the ideal all subjects are badly taught, imperfectly learned, and quickly forgotten;¹⁶ that the clas-

¹¹ "Harking Back to the Classics," *Atlantic Mo.*, 101 (1908), 482; L. R. Briggs, "Some Old-fashioned Doubts about New-fashioned Education," *Atlantic Mo.*, 86, 463; Williams, *School Review* (1909), 383-84. Gayley, *Idols of Education*; Barrett Wendell, *The Mystery of Education*; see Brunetière, *op. cit.*, 399-400.

¹² Already Lowell, *op. cit.*, VI, 161; cf. Shorey, "Discipline in Education," *Bookman*, March, 1906. See the entire recent literature of dissatisfaction with the colleges.

¹³ Huxley, *op. cit.*, 414; cf. already the admirable words of De Morgan in Youmans, *The Culture Demanded by Modern Life*, 442.

¹⁴ See *Contemp. Review*, xxxv, 833.

¹⁵ Paulsen in *Educ. Review*, xxxiii, 39, says (of classics) that we must consider what the average graduate gets, not ideals. Well, what has the average graduate been getting from the "bargain-counter, sample room, à la carte" system of the past two decades?

¹⁶ Cf. Barrett Wendell, *The Mystery of Education*, 143. On the attempt to limit education to what all "educated" men remember cf. Zielinski, p. 27.

sics are on the whole among the better-taught subjects,¹⁷ and that middle-aged business men who complain that they cannot read Greek and Latin for pleasure would not distinguish themselves if examined on mediaeval history, conic sections, old French, organic chemistry, or whatever else they happened to elect in college. As George Eliot says, "the depth of middle-aged gentlemen's ignorance will never be known for want of public examinations in this branch." It is known in the case of the classics only because they regret that they have lost them and so betray themselves.

Similarly we may assume a general recognition of the distinction between the higher and the lower sense of "practical,"¹⁸ of the fact that the most practical of studies are useful only to those who are to use them,¹⁹ and of the repeated testimony of business and technical men that the actual knowledge gained in preparatory college courses in their subjects is of little value.²⁰

Again everybody except President Stanley Hall is now aware that the phrase "dead language" is not an argument but a question-begging epithet or a foolish, outworn, metaphor.²¹

¹⁷ Cf. *Andover Review*, V, No. 2 (1884), 83; Huxley, *op. cit.*, 153; Professor Alexander Smith, in *Science*, XXX, 457-66: "Every conclusion is tested and every element in problem-solving by the scientific method is covered. . . . The method is simple, yet of unquestionable efficiency. A method so simple and certain has not yet been devised for history, literature, political economy, or chemistry."

¹⁸ Cf. *Cambridge Essays* (1855), 291; W. F. Allen, *Memorial Volume*, 129, "Practical Education"; Forman, *op. cit.*, 7-9; Clapp, *Overland*, XXVIII, 94.

¹⁹ Huxley, *Science and Ed.*, 316-21, rejects histology, comparative anatomy, and materia medica as of no practical use to the physician. Cf. Brunetière, *op. cit.*, 401; Jacob Bigelow, "Remarks on Classical and Utilitarian Studies," 1867, with the answer in *No. Am. Rev.*, CIV, 610.

²⁰ Loeb, *School Rev.* (1909), 373, "But thirteen years' experience in very active affairs taught me that the time spent at Harvard studying history of finance . . . might as well have been devoted to the classics for all the *practical* value I got." "Où sont aujourd'hui la physique, la chimie, la physiologie d'il y a trente ans seulement, et qu'en connaissons-nous pour les avoir étudiées au collège, et depuis oubliées?"—Brunetière, *op. cit.*, 94.

²¹ Cf. Fouillée, 125, on Raoul Frary's "Culture of Dead Wood." "A dead language is the dead sea of thought"—*Pop. Sci. Mo.*, xvii, 148. Cf. in Butler's *Erewhon*, the satire on "Colleges of Unreason given over to the study of the

Lastly, the right use and limits of translations are no longer likely to be misunderstood. Few will now be misled either by Labouchère's statement that Bohn's translations had shown up the classics, or Emerson's saying that he would as soon swim when there was a bridge as resort to the original in place of a translation; or Professor Moulton's argument that translations are as good as the originals for the teacher of "general" literature. And though we sometimes meet the fallacy that posed Gibbon's aunt, the argument that the student's own version is inferior to the printed translations of great scholars which he might use instead, it is merely as Gibbon says "a silly sophism which could not easily be confuted by a person ignorant of any language but her own." There is no opposition between the use of translations and the study of the original. On the contrary even a little acquaintance with the original adds immensely to their usefulness. They are tools which are best employed by those who have some insight into the method of their construction.²² For some purposes they may be almost as good as the originals. But among the purposes for which they are not so good are classroom discipline, the development of the critical intelligence and the habit of exactness, and the maintenance of high standards of national taste and culture in the educated classes.²³

Hypothetical Language"; the elaboration of the same old jest in another form by Professor Scott, *Ed.*, XVI, 360, and Spencer's constant recourse to the argument.

For the retort crushing on the "dead languages" argument, cf. the eloquent words of D'Arcy W. Thompson in *Day Dreams of a Schoolmaster*; Lowell, *op. cit.*, VI, 165; "If their language is dead, yet the literature it enshrines is rammed with life as perhaps no other . . . ever was or will be."—Bryce, *School Rev.* (1909), 369; Postgate's Liverpool Inaugural Lecture on "Dead Language and Dead Languages," 1-10; *ibid.*, 12; 85 per cent of "Ido" is intelligible to an Englishman who knows—Latin. For the superior educational value of a synthetic, classic, or a "dead" language, cf. Jebb, *op. cit.*, 621; Gildersleeve, *op. cit.*, 27-28; Mill, *op. cit.*, 352-53; Zielinski, *op. cit.*, 33 ff.; Laurie, 10; *infra*, p. 598.

²² Cf. President Mackenzie, *School Rev.* (1908), 378-80; Zielinski, *op. cit.*, 112.

²³ Cf. Gildersleeve, *op. cit.*, 20, *A. J. P.*, XXX, 353; Mill, *op. cit.*, 350; Clapp, *op. cit.*, 100; Zielinski, *op. cit.*, 85, 87; T. Herbert Warren, *Essays on Poets and Poetry*, III; Wilamowitz, *Introduction to "Hippolytus": Was ist Uebersetzen?*; Paul Cauer, *Kunst des Uebersetzens*, 4th ed., 1909; Diels, *Hera-kleitos*: "Uebersetzen ist Spiel oder, wenn man will, Spielerei."

In addition to all this controversial and negative work, we may take for granted the conventional positive and constructive arguments for classical studies elaborated by a long line of able apologists, except so far as we have occasion to summarize or refer to them in the course of this review.²⁴

These arguments are not exclusive but cumulative. The case of the classics does not rest on any one of them and is not impaired by the exaggerated importance that mistaken zeal may attribute to any one. Those who still harp on the superiority of the classics as discipline²⁵ do not therefore "tacitly acknowledge themselves beaten on the point of their intrinsic value"²⁶ and those who prefer to emphasize the "necessity of the ancient classics" for the understanding of modern life and letters²⁷ may still believe that high-school Latin is the best instrument of discipline available in secondary education.²⁸

The March number of the *Classical Journal* tabulates the aims of classical study as stated by teachers in response to a questionnaire. Thirty teachers aim at mental training, 29 at literary appreciation, 26 at power of expression, 26 at the rela-

²⁴ See *supra*, p. 585, n. 3; *infra*, p. 613-17. For some earlier apologies and discussions see Sandys, *History of Classical Scholarship*, II, 18, 51, 71, 125, 130, 151, 171, 181, 209, 256; also the writers quoted in Taylor, *Classical Study: Its Value Illustrated* (Andover, 1870). Cf. further W. G. C. in *Cambridge Essays* (1855), 282; *Essays on a Liberal Education* (1867); Arnold in *Higher Schools in Germany*, and *A French Eton*; Field, Lyttleton, and Rendall in *Essays on Education* by members of the XIII (London, 1891); Goodwin, *Educ. Rev.*, IX, 335; Postgate, "Are the Classics to Go?" *Fortnightly*, LXXVIII, 866 ff.; West, "Must the Classics Go?" *N. A. Rev.*, CXXXVIII, 151; Kelsey, "Position of Latin and Greek in American Education," *Educ. Rev.*, XXXIII, 162; Clapp, *Overland*, XXVIII, 93 ff.; T. Rice Holmes, "The Crusade Against the Classics," *National Rev.*, XLII, 97 ff.; Freeman in *Macmillan*, LXIII, 321 ff.; Andrew Lang in *Living Age*, CCXLV, 765 ff.; J. C. Collins, *Fortnightly*, LXXXIII, 260 ff.; T. E. Page, *Educ. Rev.*, XXXIV, 144; Manatt, *N. Y. Evening Post*, August 18, 1906; Anatole France, "Pour le Latin," *Vie littéraire*, I, 281; Brunetière, "La question du Latin," *Revue des deux mondes*, Dec. 15, 1885.

²⁵ E.g., Professor Sidney G. Ashmore, *The Classics and Modern Training*, chap. i. See *supra*, p. 588, n. 11-12.

²⁶ Gildersleeve, *op. cit.*, 15.

²⁷ Gildersleeve, *South. Quart.*, XXVI, 145.

²⁸ Cf. Bennett and Bristol, *The Teaching of Latin and Greek*, chap. i, and Bristol in *Educ. Rev.*, XXXVII, 243-51.

tion of the ancients to us, 26 at ability to read, 15 at general linguistic training, 8 at grammar, 6 at acquaintance with Greek and Latin literature. Obviously there is nothing incompatible in these aims. It is a question of emphasis, the needs of the class, the ability, training, and tastes of the teacher. A faddist may ride his hobby to death, whether it be optatives, or lantern slides, or parallel passages from the poets. But in return, the good teacher will almost in the same breath translate a great poetic sentence, bring out its relations to the whole of which it is a part, make its musical rhythm felt by appropriate declamation, explain a historical or an antiquarian allusion, call attention to a dialectic form, put a question about a peculiar use of the optative, compare the imagery with similar figures of speech in ancient and modern poetry, and use the whole as a text for a little discourse on the difference between the classical and the modern or romantic spirit; so that you shall not know whether he is teaching science or art, language or literature, grammar, rhetoric, psychology, or sociology, because he is really teaching the elements and indispensable prerequisites of all.

Similarly of the diverse considerations urged by former apologists and the contributors to these symposia. The case of the classics rests on no one taken singly but on their conjoint force, and it is not really weakened by the disproportionate stress sometimes laid on the weaker arguments. The illumination of scientific terminology, for example, is a minor and secondary utility of a little knowledge of Greek and Latin on which the biologist or physician is especially apt, perhaps over much, to insist. That is his contribution. He does not mean to rest the case on that. He is not answered by the argument that "ten or twelve years" of study is too big a price to pay for this result and that terminology can be learned from glossaries. For a very slight knowledge of the languages makes an immense difference in the intelligence with which the dictionary or the glossary of scientific terms is consulted and the vividness with which its statements are realized. One or two years will yield a good deal of that particular utility, and the question for the teacher of science or medicine is "whether any other non-

professional college study is likely to be more "useful" to his students.²⁹ So in arguing that the classics give the engineer a power of expression which he requires for use as well as for ornament, Professor Sadler³⁰ is not committing himself or us to the proposition that none but classicists write well and all classicists do. He simply means what all experience proves, that the study of the classics is on the whole an excellent training in expression,³¹ perhaps a better one than the unpremeditated effusions of "daily themes,"³² and that discipline in the power of exact and lucid expression is a utility for the engineer.³³ Again, Mr. Kelsey would be the last to rest the case for the classics on the fact that the wider secondary study of Greek would leave the door of choice for the profession of the ministry open to a large number of desirable candidates who now find too late that they lack the indispensable preparation.³⁴ But it is a real if minor consideration to be counted in the sum.

All of these contributions from the professions take for granted the general discipline and cultural values of the classics, and presuppose the fact pointed out by Mr. Loeb and others, that the direct business and technical utilitarian value of the so-called practical college courses is very slight. On this assumption, they supplement the ideal values of the classics by showing that, in the jargon of modern pedagogy, they also possess "adjustment values" for other professions than theology and literature.

One consideration, however, which constantly recurs in these discussions is fundamental. It is the training which the classics

²⁹ See Dr. Vaughan in *School Rev.* (1906), 392.

³⁰ *School Rev.* (1906), 402-5.

³¹ A writer in *Educ. Rev.*, XXXVIII, 88-90, argues that the difference of pronunciation makes Latin useless to the English of the high-school student.

³² Cf. Mr. Barrett Wendell's sad surmise (*The Mystery of Education*, 175) that perhaps the reason why the up-to-date Harvard student doesn't write like Addison is that Addison "had never studied English composition as a thing apart." But Addison had studied Latin composition and had a very pretty knack of turning Latin verses.

³³ Cf. *Outlook*, XCIII (1907), 87.

³⁴ *School Rev.* (1908), 567-79.

give in the art of interpretation. Classicists sometimes claim for and scientific men concede too much to the study of the classics as a means of developing the powers of expression.³⁵ They underestimate its value as a discipline of the intelligence.³⁶ They appreciate its stimulus to emotion. They fail to apprehend its subtler effect in blending and harmonizing the two—suffusing thought with feeling, informing feeling with thought. In controversy Huxley and Tyndall were fond of pointing out that the leaders of science expressed themselves with rather more vigor, point, and precision than the ordinary classicist. And their own vivid and fluent eloquence drove the argument home. In general, however, men of science are only too ready to concede with the irony which apes humility that their training has not supplied the graces and literary refinements that are supposed to qualify a man to shine after dinner or to make a good appearance on the platform. But the gifts of eloquence and fluency are sparks of natural endowment which science perhaps quite as often as philology fans into flame.³⁷ Scientific men may make haste to forget their Latin as Latin. But the mere classicist observes with admiring despair their mastery of the polysyllabic Latinized vocabulary of English. Where he says "if so" they say "in the contemplated eventuality." We must abate our claim that only the classics make men eloquent and emphatic in the expression of their own thoughts.

But it is impossible to claim too much for them as a discipline in the all-important art of interpreting the expressed

³⁵ Huxley, *op. cit.*, 130.

³⁶ Bentley's *Dissertation on Phalaris*, the type and model of philological method, has been aptly styled "a relentless syllogism." No one can compare the discourses of Renan and Pasteur at the French Academy or the Romanes lectures of Jebb (1899) and Professor Lankester (1904) without feeling that the superiority of the trained classical philologist is not solely or mainly "in the graces." It is in the intellectual qualities of subtlety, wit, sanity, breadth, coherence, and closeness of cogent dialectic that his advantage is most conspicuous. As we are speaking of "disciplinary values" it would be beside the mark to allege what Renan and Jebb would be the first to admit, that Pasteur's work was of greater service to mankind than theirs.

³⁷ On the bad style of classicists cf. *Pop. Sci. Mo.*, I. 707; Gildersleeve, *op. cit.*, 49; Spencer, *Study of Sociology*, 267.

thought of others. There is no other exercise available for educational purposes that can compare in this respect with the daily graduated critical classroom translation and interpretation of classical texts.³⁸ The instinctively sane judgment of intended meanings, the analytic power of rational interpretation—these, natural gifts being equal, are the distinctive marks of the student of classics, in varying degrees, from the secondary-school Latinist, who at least has some inkling of the general implicit logic and structure of language, to the collegian who has been exercised in the equivocations of idiom and synonym, and the finished master who can weigh all the nice considerations that determine the precise shade of meaning or tone of feeling in a speech in Thucydides, a lyric of Aeschylus, a half-jesting, half-serious argument in Plato. Information, knowledge, culture, originality, eloquence, genius may exist without a classical training; the critical sense and a sound feeling for the relativity of meaning rarely if ever. I have never met in private life or encountered in literature a thinker wholly disdainful of the discipline of the classics who did not betray his deficiency in this respect. I say in all seriousness that what chiefly surprises a well-trained classicist in the controversial and popular writings of scientific men, especially in the case of the pseudo- or demi-sciences,³⁹ is not any awkwardness of style or defect in "culture," but the quality of the dialectic and logic, the irrelevancies, the elaborations of metaphors from illustrations into arguments,⁴⁰ the disproportionate emphasis upon trifles and truisms,⁴¹ the

³⁸ The argument of Webster (*Forum*, XXVIII, 459 ff.) that the study of a language makes almost no demands upon the reasoning powers refutes itself; cf. Jebb, *op. cit.*, 558; Laurie, *Lectures on Languages and Linguistic Method*, 9-10; Fouillée, 102-3.

³⁹ Illustrations of this point are too numerous to quote here, but the repeated misapprehensions of Plato's plainest meanings in *Education as Adjustment*, 19, 62, 63, 90, by M. V. O'Shea, professor of the "science" and art of education in the University of Wisconsin, are typical. If such are the standards of accuracy and criticism of the professor of the science, what will be those of the novices?

⁴⁰ Huxley, *Science and Education*, 81 ff.; Spencer, *passim*; Dr. George E. Dawson, "Parasitic Culture," *Pop. Sci. Monthly*, September, 1910.

⁴¹ Cf. in *Culture Demanded by Modern Life* Paget's page on the "certainty that continual or irregular feeding is contrary to the economy of the human stomach."

ignoring of the issue,⁴² the naïve dependence on authority,⁴³ the outbursts of quaint unction and ornate rhetoric,⁴⁴ the constant liability to stumble like a child, or quibble like a sophist,⁴⁵ with regard to the fair presumptive meaning of alien, divergent, or hostile utterances.⁴⁶ There is for them no intermediate between the rigid, unequivocal scientific formula and mere rhetoric or sophistry, because they have never been trained to the apprehen-

⁴² E.g., Huxley's extension of "nature" to include "men and their ways," and the fashioning of the affections and of the will," *Science and Education*, 83.

⁴³ Typical examples are the use that they make as ultimate authorities of Grote's *Plato*, Lewes' *Biographical History of Philosophy*, Lange's *History of Materialism*, and Draper's *Intellectual Development of Europe*. Cf. Tyndall, *Belfast Address*, "And I have entire confidence in Dr. Draper." Huxley on the study of zoölogy: "What books shall I read? None; write your notes out; come to me for the explanation of anything that you cannot understand." Neither Youmans nor Herbert Spencer could ever be brought to admit the gross error into which Spencer was led (*Data of Ethics*, § 19), by misinterpreting Bohn's mistranslation of Plato's *Republic*, 339D. For another example, cf. Jhering *ap. Zielinski*, 111. Huxley's contrast between history and laboratory science (p. 126) is fallacious. He fails to see that the student of science innocently transfers to literature, history, and language his habit of accepting on faith all experimental results outside of his particular specialty, while the student of classical philology acquires the habit of testing by the original evidence every statement that he hears from his teacher or reads in his textbooks. Cf. Smith, *supra*, p. 589, n. 17; Fouillée *op. cit.*, 62-63, 109.

Those who repeat (e.g. Webster, *Forum*, XXVII, 453) after Spencer (*Education*, 79) that classical training establishes the habit of blind submission to the authority of grammar, lexicon, or teacher simply do not know what goes on in a good classroom. See Zielinski, *op. cit.*, 90-92. Cf. the noble passage in Mill, *op. cit.*, IV, 355, on the spirit of inquiry in Plato and Aristotle which Huxley (*op. cit.* 211), transfers *verbatim* to science, ignoring the all-important qualification, "on those subjects which remain matters of controversy from the difficulty or impossibility of bringing them to an experimental test." Cf. Jebb, appendix to *Sophocles O. T.*, 219. "It is among the advantages and the pleasures of classical study that it gives scope for such discussions as this passage (*O. T.*, 44-45) has evoked."

⁴⁴ "The suction pump is but an imitation of the first act of every new-born infant, nor do I think it calculated to lessen that infant's reverence . . . when his riper experience shows him that the atmosphere was his helper in extracting the first draught from his mother's bosom" (Tyndall, on the "Study of Physics.")

⁴⁵ Paget, *op. cit.*, p. 183: "The student of nature's purposes should surely be averse from leading a purposeless existence."

⁴⁶ Spencer, *passim*; Huxley, *op. cit.*, 144: "If their common outfit draws nothing from the stores of physical science." Both Mill and Arnold insist on acquaintance with the *results* of science. Cf. too Huxley's substitution of

sion of all recorded speech as a text whose full meaning can be ascertained only by a critical, historical, and philological interpretation of the context. The way in which the classics provide us with this training can be fully appreciated only through experience.⁴⁷ I have attempted a description elsewhere in this journal,⁴⁸ and it has often been set forth by others, and most admirably by the representatives of the law in these symposia.⁴⁹ The law itself is the only discipline comparable to the classics in this regard.⁵⁰ But while more severe perhaps and strictly intellectual it is narrower in its range⁵¹ and does not include the union of feeling and intelligence which makes the study of the classics an incomparable method of general education. For this reason though the law would be the best available substitute for the discipline of the classics, thoughtful lawyers would be the last to advocate the substitution.

But it is time to turn from these special considerations to a broader view of the whole subject. Classical education is not an academic superstition, an irrational survival of the Renaissance.⁵² It is a universal phenomenon of civilization. Higher non-vocational education has always been largely literary and linguistic, and it has always been based on a literature distinguished from the ephemeral productivity of the hour as classic. It was so at Rome, in China, in Hindustan, and among the Arabs. The Greeks, whose supreme originality makes them an exception to every rule, are only an apparent exception to

Middle Ages for Renaissance (*ibid.*, 149-50) and his consequent contradiction of his own admission on p. 209, "that the study of classical literature familiarized men with ideas of the order of nature."

⁴⁷ Zielinski, *op. cit.*, 31 ff.

⁴⁸ V, 225-29.

⁴⁹ Cf. Starr on the discipline of the judgment and training in the interpretation of texts, *School Rev.* (1907), 412, 415; Evans, *ibid.*, 421. Foster, *ibid.* (1909), 377-79.

⁵⁰ Whewell adds that it is like mathematics, essentially deductive. Without committing ourselves to the "inductive method of learning languages" we may say that the interpretation of a classic text is often an excellent exercise in "inductive-observant" thinking.

⁵¹ Hutchins, *ibid.* (1907), 427-28.

⁵² For this commonplace see *infra*, p. 601.

this—they studied Homer⁵³ and their own older classics to form, not inform, their minds.⁵⁴ This universal tendency is only in part explained by the religious or superstitious reverence for sacred texts. It is in the main due to an instinctive perception of the principles on which the case for the classics still rests. The education of those who can afford time for non-vocational study is not in the narrower or more immediate sense of the words a "preparation for life"⁵⁵ but, from the point of view of the individual, a development of the faculties; from the point of view of society, the transmission of a cultural, social, moral tradition.⁵⁶ It must be a broad discipline of the intellectual powers that shall at the same time attune the aesthetic and the moral feelings to a certain key.⁵⁷ No study but that of language and literature can do this, and it is best done through an older and more synthetic form of language and a literature that is, in relation to the student and his environment, classic.⁵⁸ This is the meaning of the late W. T. Harris's somewhat cryptic Hegelism that self-alienation is necessary to self-knowledge.⁵⁹ Or to put it more concretely, the critical interpretation or translation of such a language supplies the simplest and most effective all-round discipline of the greatest number of faculties. The ideal form and content of such a

⁵³ Cf. Bréal, 553: "On oublie qu'ils avaient leur antiquité dans l'épopée."

⁵⁴ Cf. Bain, *Contemp. Rev.*, xxxv, 837: "The fact that the Greeks were not acquainted with any language but their own . . . I have never known any attempt to parry this thrust."

⁵⁵ For such tautologous formulas as definitions of education cf. my "Discipline in Modern Education," *The Bookman* (March, 1906), 94; to the list there given add "Adjustment," which obviously includes everything and therefore anything.

⁵⁶ See Brunetière, *op. cit.*, 406, and the admirable work of Fouillée, *Education from a National Standpoint*, in Appleton's "International Education Series," p. 54. and *passim*.

⁵⁷ Arnold's "relating what we have learnt . . . to the sense for conduct and the sense for beauty."

⁵⁸ "There are five times as many mental processes to undertake in translating from Latin and Greek into English as there are in translating a modern language." Lord Goschen; cf. *supra*, n. 21; *infra*, n. 99.

⁵⁹ "Self-alienation which consists in projecting one's self into the idoms of a dead language," etc., etc.—P. R. Shipman, *Pop. Sci. Mo.*, XVII, 145.

literature elevated above the trivialities, disengaged from the complexities, disinterested in the conflicts of contemporary life⁶⁰ awakens the aesthetic and literary sense,⁶¹ ennobles and refines feeling.⁶² And the very definition of classic implies that it is the source and chief depository of the national tradition either of religion or culture or both.

For modern Europe these conditions were fulfilled by the study of the classics of Greece and Rome which the Renaissance established in the face of a scholasticism that called itself science,⁶³ and which, adapted to altered conditions, we have still to defend against the exclusive pretensions of sciences that, uninformed by the temper of humanism, threaten to renew the spiritual aridity if not the intellectual futility of scholasticism.

The debate which began in the reaction from the Renaissance and found its first notable expression in the famous "quarrel of the ancients and moderns" is now more than two hundred years old.⁶⁴ New arguments are hardly discoverable at this date.

⁶⁰ Gladstone *ap.* Jebb, 570.

⁶¹ Jebb, 526. Cf. the definition of education as the aesthetic revelation of the world.

⁶² "Much lost I, something stayed behind,
A snatch maybe of ancient song;
Some breathing of a deathless mind,
Some love of truth, some hate of wrong."—*Ionica*.

⁶³ Cf. *University of Illinois Studies*, III, No. vii, p. 29.

⁶⁴ Not to speak of the polemic of the more illiberal Christian fathers against "pagan" studies, the controversy could be traced back to the opposition of scholasticism and the arts in the mediaeval universities; cf. *Univ. of Ill. Studies*, III, No. vii, pp. 19, 27 ff. Or we could begin in full Renaissance with the humanist Vives, advocate of the study of the vernacular; with Bacon, who, though himself widely read in the classics and writing in Latin, is the chief source of the rhetoric of the eighteenth and nineteenth-century polemic of scientific men against the classics; or, better yet, with Descartes, who anticipates by two hundred years the type of Spencer and Youmans and President Stanley Hall. Cf. in Cousin, X, 375, his funny letter to Madame Elizabeth deploring Queen Christina's enthusiasm for Greek. So Spencer more in sorrow than in anger comments (*Autobiog.*, II, 183) on Mills' Inaugural which Youmans quotes not quite ingenuously (*Gildersleeve, op. cit.*, 11). It is easy to cite sporadic denun-

At the most we may endeavor to weigh the old ones with more discretion, adapt them to the present conditions, and throughout to insist on a vital distinction which defines the issue today. I refer to the distinction between past adjustments or reductions of exclusive or excessive claims of classical studies and present efforts and tendencies to abolish them altogether. Here, as often, a quantitative distinction becomes qualitative, a difference of de-

ciations of the exclusive study of the classics and satire of bad teaching from the writers of the seventeenth and eighteenth centuries. Sir Thomas Browne, himself steeped in the classics, incidentally writes, anticipating Spencer, in the style of Macaulay: "'Tis an unjust way of compute, to magnify a weak head for some Latin abilities and to undervalue a solid judgment, because he knows not the genealogy of Hector." Cf. Rigault's well-known book; Macaulay's "Essay on Sir William Temple"; Jebb's Bentley; Brunetière, *Époques*, 220; René Doumie, "La Manie de la Modernité, *Études de Litt. Française*, III, 1-23; Sandys, *History of Classical Scholarship*, II, 403 ff. For the eighteenth century in France with its strange transition from dying pseudo-classicism to the second classical renaissance, see the excellent work of Bertrand, *Fin du Classicisme*, and for Germany, see Paulsen, *Geschichte des Gelehrten Unterrichts*, II. In nineteenth-century controversy the chief epochs are marked by (1) Sydney Smith's "Too Much Latin and Greek," *Ed. Rev.* (1809)—mainly an attack on Latin verse, etc. Anticlassicists quote from it at second hand "the safe and elegant imbecility of classical learning." They should also quote, "up to a certain point we would educate every young man in Latin and Greek." (2) Macaulay, "The London University," *Ed. Rev.* (1826), a political tract against the Tory opposition in Macaulay's most extreme rhetorical style. With the "Essay on Bacon" it has served as a repertory of fallacies, and it is probably a chief source of Spencer. (3) Spencer's *Essay on Education* (1858-60), mainly an elaboration of the fallacy (anticipated by Plato, *Rep.*, 438E) that knowledge of "useful things" is for educational purposes necessarily and always the most useful knowledge. To this we may relate the controversies of the fifties and sixties and their prolongation to our own time. See the various papers dating from 1854 on in Huxley's *Science and Education*. The year 1867 marks a date with Mill's Inaugural and Youmans' *Culture Demanded by Modern Life*; and *Essays on a Liberal Education*. Before the discussion of these had died away in America the conflict was rekindled by Charles Francis Adams' *College Fetish*, since which it has been continuous and can very easily be followed in the indices of the *Nation*, the *Atlantic Monthly*, the *Popular Science Monthly*, the various journals of education, the *Independent*, etc. For Germany see Paulsen, *Geschichte des Gelehrten Unterrichts*, II, 441 ff., 595; "Intervention of the Emperor," 620 ff. For France cf. Fouillée, 94, and Translator's Preface, xiii; Weiss, "L'Éducation Classique," *Revue des Deux Mondes*, 1873, V, 392; Brunetière, "La Question du Latin" (review of Raoul Frary), *ibid.*, 1885, VI, 862; Bréal, "La Tradition du Latin," *ibid.*, CV, 551.

gree passes into a difference of kind.⁶⁵ The truism that Greece and Rome mean less for us than they did for the men of the Renaissance is not even a presumption that they count for little or nothing.⁶⁶ Apart from all technical considerations of curricula, degrees, and educational machinery, it is broadly desirable that classical studies should continue to hold a place in higher education fairly proportionate to their significance for our total culture. They will not hold that place if the representatives of the scientific and "modern" subjects enter into an unholy alliance with the legions of Philistia to swell the unthinking clamor against dead languages and useless studies. Whatever the talking delegates of science may say in their haste, thoughtful scientific men⁶⁷ require no professor of Greek to tell them that the languages and literatures of the 1300 years of continuous civilization from Homer to Julian subtend a far larger arc of the great circle of knowledge than Sanskrit or Zend or the other specialties to which they are so often compared. Whether they hold this place by their intrinsic

⁶⁵ So already Gildersleeve in 1868 (p. 10): "Sydney Smith's complaint of 'Too much Latin and Greek' has become the war-cry, 'Little Latin and no Greek at all.'"

⁶⁶ For this common *non sequitur* cf. Zielinski, *op. cit.*, 15; Huxley, *op. cit.*, 149; Macaulay, *passim*. The argument is used already by Descartes.

⁶⁷ I cite a few names at random: Berthelot, *Science et Morale*, 125, favors two types of education, "l'un fondé essentiellement sur les lettres anciennes," etc. Lord Kelvin, in his *Life* by Thompson, p. 1115: "I think for the sake of mathematicians and science students Cambridge and Oxford should keep Greek, of which even a very moderate extent is of very great value." Humboldt's and Emil du Bois Reymond's views are well known (Fouillée, *op. cit.*, 177). See also President A. C. Humphreys in *Proceed. Forty-Eighth Ann. Commence. Penn. State Coll.*, 44. Josiah Cook, *Pop. Sci. Mo.*, XXIV, 1 ff. Frederick B. Loomis, *Independent*, LIX (1905), 486. Cf. Whitman, Barnes, Pierce, Dabney, Dana in the symposium of April 3, 1909. The hostile testimony (e.g., of Nef) refers largely to required or excessive classics. Cf. the fine words of Huxley, *Science and Education*, 98 and 182. Tyndall, *Fragments of Science* ("Home Library"), 415. Thayer in *St. Louis Congress*, VI, 218: "When in the period of so-called secondary education it is proposed to substitute the study of the natural sciences for a good training in the humanities, there is danger of drying up some of the sources from which this very scientific expansion has sprung." For German scientific men see Holmes, *Nat. Rev.*, XLII, 103 ff.

beauty and sublimity,⁶⁸ by "the grand simplicity of their statement of the everlasting problems of human life,"⁶⁹ by their disciplinary value, by their enormous contribution of facts to the mental and moral and historical sciences⁷⁰ and the "wisdom of life,"⁷¹ by their renewal of the intellectual life of Europe at the Renaissance and yet again at the German revival and reorganization of science at the close of the eighteenth century, or as the sources and inspiration of modern literature⁷² and by their still dominant influence in the greatest English poets of the nineteenth century or by all these things together, matters not. They hold the place, and they cannot be relegated to the position of erudite specialities without an emasculation of our discipline and an impoverishment of our culture.⁷³

But controversy like all literary forms tends to stereotype itself. Educational conventions still echo to denunciation of abuses as obsolete as the Inquisition. Language that would be an exaggeration if used of the most hide-bound old-style, Latin verse writing English public school, the narrowest French *lycée*, is applied to "the tyranny of the classics" in high schools where the teacher is forbidden to use the Bible and is applauded for taking the daily newspaper as a textbook. The

⁶⁸ Jebb, 529; Mill, *op. cit.*, IV, 352: "Compositions which from the altered conditions of human life are likely to be seldom paralleled in their sustained excellence by the times to come."

⁶⁹ Huxley, *Science and Education*, 98.

⁷⁰ For the propaedeutic implicit or indirect educational values of classical study cf. Shorey in *School Rev.*, V, 226-27; the illustrations drawn from his own teaching by Zielinski, *op. cit.*, 99 ff. ("Ein Philolog kann alles brauchen"); Shorey, "Philology and Classical Philology," *Class. Rev.*, I, 182-83 ff.; Matthew Arnold's charming "Speech at Eton," *Irish Essays*, V; Wenley, "The Nature of Culture Studies," *School Rev.*, June, 1905.

⁷¹ Mill, *op. cit.*, IV, 354 ff.; Gildersleeve, *op. cit.*, 21; Jebb, *op. cit.*, 540.

⁷² Jebb, *op. cit.*, 54; *infra*, p. 612.

⁷³ Cf. among countless quotable utterances to this effect from the chief writers of the nineteenth century, Richter cited by Zielinski, *op. cit.*, 109, and Laurie, *op. cit.*, 186: "Mankind would sink into a bottomless abyss if our youth on their journey to the fair of life did not pass through the tranquil and noble shrine of antiquity." Froude, *Words About Oxford*: "This would be to exclude ourselves from an acquaintance with all past time except in monkish fiction," etc.

protests of French liberals against the former official requirement of a classical education for access to all professions and public offices are transferred to American conditions to which they are wholly inapplicable.⁷⁴ The arguments of Sydney Smith denouncing compulsory Latin verse writing and of Macaulay holding a brief for the University of London against the obstructionist prejudices of Oxford or elaborating a false antithesis between the Baconian and the Platonic philosophy are taken from the context⁷⁵ and used in support of policies which Sydney Smith and Macaulay would have been the first to deplore.

It is time to recognize that the work of Huxley, Tyndall, Spencer, Youmans, and President Eliot has been done once for all. "The mere man of letters who affects to ignore and despise science" may have existed in Huxley's England. Today he is as extinct as the dodo. The "enemies of science" of whom Professor Lankester complains are speech automatisms surviving in the rhetoric of science.

The victory of our scientific colleagues is overwhelming, and the Cinderella⁷⁶ pose is an anachronism.⁷⁷ Huxley was fighting to reform schools in which all boys, whatever their tastes, were compelled to compose Latin verses, and in which, as he said, with gross but then pardonable exaggeration, twelve years' hard study of Greek left the victim unable to construe a page of easy prose. And so today professors of science who are not quite Huxleys step out of their palatial laboratories and splendidly equipped offices to thunder against the obstruction of modern progress by classics in schools where not 2 per cent of the students learn the Greek alphabet, where no one is required to study Latin, and few do study it more than two or three years. They forget that if Huxley were with us today he would probably be pleading for

⁷⁴ See Shorey in *Proc. 5th Conf. Assoc. Am. Univ.*, 70.

⁷⁵ E.g., by Woodward, *Proceedings Am. Assoc. for Adv. of Sci.*, 1907; cf. *Indep.*, LXII, 107; and by H. W., "The Battle of the Books," *Westminster*, CLX; 425 ff.

⁷⁶ Spencer, *op. cit.*, 87, copied by all his successors.

⁷⁷ "It seems clear that science nowadays is proud and not literature."—Fouillée, *op. cit.*, 59.

a revival of classical studies.⁷⁸ Whatever the grievances of the past, present attacks on the classics are inspired by the revolt against discipline and hard work, the impatience of all serious pre-vocational study, the demand for quick utilitarian results, and absorption in the up-to-date.⁷⁹ Our scientific colleagues who invoke these sentiments against us will find that they are playing with fire and enlisting allies whom they cannot control. The public will see no logical halting-place between their position and that of Mr. Crane of Chicago. The boy whom they have encouraged to shirk the discipline of Latin will find mathematics and physics still more irksome. The professional constituency of engineers and chemical experts they will retain. But the majority will go snap hunting in the happy fields of English literature and the social sciences. Let not our scientific colleagues deceive themselves. They are more allied to us by the severity and definiteness of their discipline than divided by differences of matter and method. In the fundamental classification of studies into those which exercise and those which titillate the mind they belong with us. You cannot really teach anything by lectures, experience meetings, heart-to-heart talks, the pseudo-Socratic method, and expansion of the student's personality. But you cannot even pretend to teach classics and the exact sciences in this way. In these days that is a bond. As serious workers and teachers you belong with us. The allies whom you encourage to sap our discipline with the "soft moisture of irrelevant sentimentality" will not stop there. They are past masters in what Mrs. Wharton calls the art of converting second-hand ideas into first-hand emotions. They will humanize your cold abstract sciences in a way that will surprise you. I quote from the report of a recent educational conference:

At 3 P.M. Miss N. Andrews, principal of the Happy Grove Girls' School, conducted a regular junior class meeting. A very helpful feature of this meeting was an illustration by the use of iodine and hyposulphite of soda,

⁷⁸ Cf. the enormous concession in *Science and Education*, 153.

⁷⁹ Cf. the brilliant and caustic paper by Mrs. Emily James Putnam in *Putnam's*, III, 418; Zielinski, *op. cit.*, 206.

showing how sin defiles the heart, and how the blood of Jesus can cleanse it.

When this generation of kindergarten Christian Scientists arrives in your laboratories you will wish too late that they had been set to gnaw the file of Latin grammar for a year or two.⁸⁰ You will find a new meaning in Professor Karl Pearson's statement⁸¹ that the most valuable acquisitions of his early education were the notions of method which he derived from Greek grammar.⁸² You will admit that after all there may be something in Anatole France's warning that since the methods of science exceed the limitations of children the teacher will confine himself to the terminology. You will be able to interpret Brunetière's remark that neither infancy nor youth can support the intoxication with which science at first dazes its neophytes, and you will sadly verify the accomplishment of George Eliot's prophecy of a generation "dizzy with indigestion of recent science and philosophy."

Such terms as "culture," "discipline," "utility," a "liberal" education have been much bandied about in idle controversy.⁸³ They are all, perhaps, equivocal or question-begging, and hardly admit of authoritative definition. Yet you all understand them well enough to know what I mean by saying that the study of the exact sciences yields utility, discipline, and a kind of culture; that classics give culture, discipline, and a kind of utility; and that today they are conjointly opposed to a vast array of miscellaneous "free electives" which are more popular largely because as at present taught they demand and impart neither discipline nor culture nor utility, but only information, entertainment, and

⁸⁰ Cf. Sadler in *School Rev.* (1906), 403: "What . . . can be done in a subject such as physiology when," etc.

⁸¹ *Grammar of Science.*

⁸² Cf. also Fouillée, *op. cit.*, 66, top.

⁸³ Cf. Huxley, *op. cit.*, 141, on "Real Culture"; Flexner in *Science*, XXIX, 370; Frederick Harrison's satire on Arnold's "Culture and Anarchy," with Arnold's reply; Youmans' "The Culture Demanded by Modern Life"; *Essays on a Liberal Education*, Macmillan, 1867; Newcomb, "What is a Liberal Education?" in *Science*, III, 435; Woodward in *Science*, XIV, 476; Huxley, *op. cit.*, 86; Mrs. Emily James Putnam, *Putnam's*, III, 421.

intellectual dissipation. These studies fall into two chief groups, the demi-sciences, that is, the so-called moral and social sciences, and modern linguistic and literary studies. I intend no disparagement by the term demi-sciences. There is no higher university work than pioneer exploration of subjects not yet definitely constituted as sciences. But the personal magnetism in the classroom of a Giddings, a Small, a Vincent, a Ross, a Cooley should not blind us to the fact that these studies demand, as Plato said,⁸⁴ the severest, not the loosest, preparatory training, and that, "freely elected," without such preparation, they will merely muddle the mind of the average American undergraduate.

The outspoken expression of this opinion, which the majority of classicists share, threatens to convert the old warfare of science and classics into a conflict between classics and the social sciences.⁸⁵ For the history of this merry war we cannot delay. One point only concerns us here. Sociology and the new psychology have staked out the entire coast of the unknown continent of knowledge and claim all the hinterland. Abstractly and a priori this is plausible enough. An infinite psychologist could pronounce on the credibility of a witness, advise infallibly on the choice of a vocation, and prescribe the proper intellectual diet for every idiosyncrasy. In a finite psychologist it is—well, this is an age of advertising.

Like claims could be made for an abstract or ideal sociology. Education is preparation for life, and human life and mind exist and develop only in and through society.⁸⁶ After the psychologist has annexed everything else, the sociologist may logically swallow him, while the physiologist lies in wait for both. They may be left to fight that out—a hundred or a thousand years hence.

⁸⁴ Cf. my paper on "Some Ideals of Education in Plato's Republic," *Educational Bi-Monthly*, February, 1908.

⁸⁵ Many representatives of the mental and moral sciences, of course, recognize that classics are still the best available propaedeutic for them; notably Fouillée, and with some reserves Giddings.

⁸⁶ To readers of Plato's *Protagoras* and *Republic*, there is something supremely funny in the statement that "the most important general advance [in psychology from 1881 to 1906] seems to be the recognition that the mind of the human adult is a social product."—E. Ray Lankester, *The Kingdom of Man*, 122.

But today there is no science of psychology,⁸⁷ sociology, or pedagogy that can pronounce with any authority on either the aims or the methods of education.⁸⁸ The confident affirmations of our colleagues in these departments are not, then, to be received as the pronouncements of experts, but as the opinions of observers who like ourselves may be partisans.⁸⁹

Throughout this discussion I have taken for granted the general belief of educators, statesmen, and the man in the street, from Plato and Aristotle to John Stuart Mill, Faraday,⁹⁰ Lincoln,⁹¹ President Taft,⁹² and Anatole France, that there is such a thing as intellectual discipline, and that some studies are a better mental gymnastic than others. This, like other notions of "common-sense," is subject to all due qualifications and limitations. But it is now denied altogether, and the authority of Plato, Mill, Faraday, or Lincoln is met by the names of Hinsdale, O'Shea, Bagley, Horn, Thorndike, Bolton, and DeGarmo. Tastes in authorities differ. But these gentlemen are cited, not as authorities, but as experts who have proved by scientific experiment and ratiocination that mental discipline is a myth. There is no such proof, and no prospect of it. There are in general no laboratory experiments that teach us anything about the higher mental processes which we cannot observe and infer by better and more natural methods.⁹³ Still less are there any

⁸⁷ Cf. Jowett's *Plato*, IV, 175, "On the nature and limits of Psychology."

⁸⁸ Cf. Zielinski, *op. cit.*, 23; James, *Talks to Teachers*, 130-37; Anatole France, *Le Jardin d'Épiqueure*, 218: "Quand la biologie sera constituée, c'est à dire dans quelques millions d'années, on pourra peut-être construire une sociologie"; Shorey, *Class. Jour.*, I, 187; *St. Louis Congress*, III, 370, 375-76.

⁸⁹ Observe the disinterested scientific temper in which Superintendent Harris discusses the psychology of formal discipline: "But Greek is already a vanishing element in our secondary schools, and it needs but a few more strokes to put it entirely hors de combat."—*Education*, XXV, 426.

⁹⁰ *Culture Demanded by Modern Life*, 200.

⁹¹ See Croly, *Promise of American Life*, 91-92.

⁹² *Bryn Mawr Alumnae Quarterly*, IV, No. 2, 79.

⁹³ Inserting needles into holes, estimating areas, drawing with the hand hidden behind a screen, etc., etc., are all falsifying simplifications of the infinitely complex problem to the solution of which they may or may not lead in the years to come. Nor despite Dr. Dawson's warning against "neurones and con-

that can even approximate to the solution of the complicated problem of the total value and effect of a course of study. There is no authentic deliverance of science here to oppose to the vast presumption of common-sense and the belief of the majority of educated and practical men.⁹⁴ And we are therefore still entitled to ask, If you reject the classics and the elective system is a failure, what are you prepared to substitute?⁹⁵ Theoretically there are alternatives which, not being a fanatic, I would gladly see organized into a rational group system.⁹⁶ But the practical alternative which anti-classical fanaticism at present offers is formulated by one of your own faculty with the unconscious irony of italics as "*Anything and everything connected with*

necting fibres fashioned through and through for the study of the Latin language," do we know enough about "localization of function" to argue the question intelligently on this basis. The leading opponents of the idea of mental discipline, whenever they forget themselves, all take it for granted, or make self-stultifying concessions to it.

⁹⁴ Cf. Zielinski, *op. cit.*, 12, 22; Plato, *Republic*, 526B, 527D. There is no space to continue the discussion here. But I doubt whether many competent psychologists will be willing seriously to maintain that serious results have as yet been achieved. The whole recent "unsettlement of the doctrine of formal discipline" took its start as a polemical move and not as a disinterested scientific investigation. And it still bears the impress of its origin. It was perhaps suggested by Youmans' essay on "Mental Discipline in Education," introductory to *The Culture Demanded by Modern Life*. Cf. O'Shea, *Education as Adjustment*, ix: "My chief motive . . . is to try to show that the doctrine of formal training, etc., etc.," Heck, *Mental Discipline and Educational Values*, I, strangely says, after Monroe, that the doctrine of formal discipline was first clearly formulated in the seventeenth century in defense of classical studies. Professor Bagley, *The Educative Process*, 211, gravely alleges against the doctrine his experience that a year of habituation to hard work at his desk did not discipline him out of a disinclination to regular work on the farm in his summer vacation. This may pair off with the "experiments" which show that students who are compelled to prepare neat papers in one subject will not spontaneously take the same extra pains in other classrooms (*ibid.*, 208).

⁹⁵ Cf. Lowell, *Prose Works*, VI, 166: "We know not whither other studies will lead us. . . . We do know to what summits . . . this has led and what the many-sided outlook thence."

⁹⁶ Cf. Fouillée, *op. cit.*, 151-52, and Shorey, in *Proceedings of the Fifth Conference of the Associations of American Universities* (February, 1904, 66-67), and in the *Proceedings of the International Congress of Education* (Chicago, 1893, 138).

modern life"—a large order.⁹⁷ Professor King would of course know how to apply this formula with discretion. But he would perhaps be somewhat dismayed to see how it is applied in the short course of the Cokato High School by an enthusiastic convertite who declares that "we are doing some intensive work in spots out in this state regardless of college requirements in English or any other requirements this side of the moon."

The modern literary and linguistic group of studies presents no problem in theory. There may be some question how much Latin those students whose education ends with the high school can afford to take. But the more advanced collegiate and university study of English, modern languages, history, and philosophy without any preparation in classics is a sorry jest.⁹⁸ The teachers themselves are aware of this when not misled by departmental rivalries or cowed by fatalistic acquiescence in the low standards which the spoiled American boy and the indulgent American parent are forcing upon our schools.⁹⁹ They too must be brought to realize that the cause of the higher culture is one and their lot is bound up with ours.¹⁰⁰ Our colleagues in modern languages have had their warning from President Schurman. They cannot join the hue and cry against dead classics and retain their seminars in Dante and Old French and their culture courses in Racine and Goethe. For the practical man Corneille and Lessing are as dead as Homer and

⁹⁷ *Educational Review*, XXXIII, 469. For a good criticism of this ideal, cf. T. E. Page, in *Edinburgh Review*, XXXIV, 144; Fouillée, *op. cit.*, 136 ff.

⁹⁸ See Churton Collins, "Greek at the Universities," *Fortnightly* (1905), 260-71.

⁹⁹ Cf. Grandgent, "French as a Substitute for Latin," *School Review*, XII, 462-67; Warren, *Methods of Teaching Modern Languages*, 114: "The first duty of modern language instructors is to preserve as far as possible the advantages derived from the study of the displaced languages, Greek and Latin." As Fouillée says (p. 156), the alternative is either the hotel waiter's cheap polyglotism or the study of living languages by the critical methods applied to the languages called dead. Cf. Jebb, *op. cit.*, 558. Lowell, *op. cit.*, 156: "In a way that demands toil and thought . . . as Greek and Latin, and they only, used to be taught."

¹⁰⁰ Lowell, *op. cit.*, 157.

Aristotle. His only use for French is "to fight the battle of life—with waiters in French restaurants." Cornell University, possessing the finest Dante library in the country, had not a single student of Dante in 1904.¹⁰¹ After Greek, Latin, and after Latin, all literary, historical, and philological study of French and German. Convert your departments into Berlitz schools of languages. It is that which you are educating the public to demand, and that is all your students will be capable of. They already complain that anything older or harder than Labiche is difficult and useless.¹⁰²

The teachers of English may lay the same warning to heart. Shakespeare is the belated bard of feudalism. Milton's diction is as obsolete to the readers of Mr. George Ade as his theology. Tennyson is a superannuated representative of the Mid-Victorian compromise. Literature dates from Robert Louis Stevenson; and Mr. Bernard Shaw, Mr. Wells, and Mr. Chesterton are not only clever fellows and shrewd advertisers, but profound thinkers. The Bible, too, is an obsolete and forgotten classic. There is nothing that the unhappy teachers of English can presuppose today. They have sowed the wind and are reaping the whirlwind. Here is a letter recently addressed to the dramatic critic of a great newspaper:

I would like to undertake a course of reading on the literature of the stage. . . . I don't want to be directed to Shakespeare, or the Greek dramatists, or to Bell's *British Theatre* or to any other compendium of chestnuts that a man with any healthy interest in life would rather saw

¹⁰¹ Forman, *op. cit.*, 15.

¹⁰² Whatever may be said of the difficulty of Latin syntax or Greek irregular verbs, it is no paradox to maintain that the ancient classics are more simple, sane, direct, and lucid, and therefore not only a better educational instrument but easier than the masterpieces of modern literature would be if seriously taught. Cf. Gildersleeve, *op. cit.*, 73; Fouillée, *op. cit.*, 124: "not universally intelligible"; *ibid.*, 158 ff. Shelley's "Prometheus" is harder and more confused than that of Aeschylus. Brunetière, *Question du latin*, 872: "Dante est trop subtil, Shakespeare est trop profond, souvent aussi trop obscur; Goethe est trop savant," etc. So Goldwin Smith *apud* Taylor, 355. Illuminating in this connection is Professor Canby's experience that the despised eighteenth-century Latinized English classics are better for teaching than the Elizabethans or the Romantics. See *Nation* (August 4, 1910), 99.

wood than read.¹⁰⁰ I love the theatre and would like to extend my knowledge if any of the live stuff is in print."

There you have the answer to Huxley's oft-repeated argument: "If an Englishman cannot get literary culture out of his Bible, his Shakespeare, and his Milton, neither in my belief will the profoundest study of Homer and Sophocles, Virgil and Horace, give it to him." The question is not whether an Englishman can, but whether the American student will, if the universities encourage the spirit of philistinism to create an atmosphere in which the study of Homer and Sophocles cannot live.¹⁰⁴ You may perhaps reduce classical studies to the position of Sanskrit and Zend and Hebrew. If you do, we shall faithfully hand on the torch of true scholarship to the audience fit and few that remains, and watch with amusement your attempts to teach the history, philology, and higher criticism of English literature in the environment that you have helped to create.¹⁰⁵ In short, as we said to our scientific colleagues, that the case of the classics is the case of serious discipline in education, so we warn the representatives of the modern humanities that the cause of all humane culture and historic criticism is bound up with the studies that were the first and remain the highest humanities.

There is something to be said for the view that Tennyson, Milton, Goethe, Dante, and Racine are as obsolete as Virgil and Sophocles, and that the modern man's sole requirements are technical experts cheaply hired, indexes to "hold the eel of science by the tail," the command of a "nervous," colloquial English style, a "typewriter girl" to correct his spelling, and a vaudeville to relax his mind. But there is very little to be said for the endeavor to rear a vast fabric of historic and literary

¹⁰⁰ Clearly a disciple of Spencer, who after reading six books of the *Iliad* to "study superstitions" "felt that I would rather give a large sum than read to the end."

¹⁰⁴ Cf. *Pop. Sci. Mo.*, XVII, 150: "If I had my way in the halls of education, I would not only dismiss Latin and Greek, but send off packing with them the historical and comparative study of English itself."

¹⁰⁵ Cf. the wail of Gayley, "The Collapse of Culture," in *Idols of Education*; Barrett Wendell's rueful confessions in *The Mystery of Education*.

scholarship in our universities without laying the indispensable foundations. Our culture might conceivably forego the first-hand knowledge of the supreme literary masterpieces of the world. We might sit down in stolid ignorance of the thousand years of uninterrupted civilization from Aeschylus to Claudian. We might renounce the historical study of the Middle Ages. But that would only be the beginning of our losses. The languages, the literatures, the philosophy, the whole higher spiritual tradition of the past four hundred years are unintelligible without this key.¹⁰⁶ It is impossible to explain this to those who have not already in some measure, however slight, verified it in their own experience. The detail is too enormous. The books and essays to which I could refer you only skim the surface of the subject.¹⁰⁷ Anything that we could add here would be superfluous for those who know, and of those who will not believe or who cannot divine what we are hinting at we can only say with Doctor Johnson, "Sir, their ignorance is so great that I am afraid to show them the bottom of it." They are not initiated. They do not understand the *lingua franca* of European culture. Its vocabulary, its terms of art and criticism, its terminology of science and philosophy, charged with the cumulative associations of three thousand years, are for them the arbitrary counters of a mechanically memorized Volapük. The inspirations, the standards of taste, the canons of criticism, the dialectic of ideas, of the leaders of European civilization for the past four centuries are non-existent for them. They cannot estimate the thought of their own or any other generation, because they do not know how to distinguish its peculiar quality from the common inheritance.

¹⁰⁶ Cf. Brunetière, "La question du latin," *Revue des deux mondes*, 1885, VI, 862 ff.; Clapp, *op. cit.*, 97-98; Shorey, "Relations of Classical Literature to Other Branches of Learning," *St. Louis Congress* (1904), III, 377-85.

¹⁰⁷ Cf. the bibliography in Shorey, *supra*; Zielinski, *Our Debt to Antiquity*; Mahaffy, "What Have the Greeks Done for Civilization?"; Jebb, *Essays and Addresses*, 541-42, 560; Gildersleeve, *op. cit.*, 23, 44, 60; Churton Collins, *The Study of English Literature*, (Macmillan, 1891). Lowell, VI, 166: "Greek literature is also the most fruitful comment on our own"; 174: "the bees from all climes still fetch honey from the tiny garden-plot of Theocritus" (cf. Kerlin's Yale dissertation, "Theocritus in English Literature").

Literature and history are to their apprehension all surface. The latent meanings, the second intentions, the allusions and the pre-suppositions escape their sense. They do not divine the existence of the deeper currents.

So much for the ideal. But will the average graduate get all this? No, but he will get something, and the total culture of our country will get more. What will the average school boy get, or the average business man retain, of science?

Once more, let us compare either ideals with ideals or actualities with actualities. We are not saying that it is a great thing for our undergraduates to know a little classics. We are saying that it is a monstrous thing that they should not know any.¹⁰⁸ It is deplorable to have been taught Latin badly, to have forgotten how to read Virgil or Cicero with pleasure, and to vent your pique in denunciation of the only studies whose loss you seem to regret. But to have had no Latin at all practically means that you do not know the logic or understand the categories of general grammar and those forms of language which are at the same time forms of thought; that you do not know and cannot safely learn from a lexicon the essential and root meanings of English vocables, and can therefore neither use them with a consciousness of their prime sensuous force¹⁰⁹ nor guard yourself against mixed metaphor;¹¹⁰ that you are mystified by the variations of meanings in like Latin derivations in Shakespeare, the Romance languages, and modern English; that you have no historic feeling for the structure of the period which modern prose inherited from Isocrates through Cicero; that the difficulty of learning French or Italian is tripled for you,¹¹¹ and the possibility of really under-

¹⁰⁸ Cf. Harris, "A Brief for Latin," *Educational Review*, XVII, 313.

¹⁰⁹ Cf. Pater, "On Style," *Appreciations*, 13, 17. It is hardly necessary to answer President Hall's cavil that an obtrusive consciousness and a pedantic use of etymology may sometimes be harmful.

¹¹⁰ Gildersleeve, *op. cit.*, 25.

¹¹¹ It is an exaggeration rather than a misrepresentation when Mill speaks (*op. cit.*, IV, 345) of "that ancient language . . . the possession of which makes it easier to learn four or five of the continental languages than it is to learn one of them without it." On the greater ease with which classicists acquire the languages of India cf. Postgate, in *Fortnightly*, LXXII, 857.

standing them forever precluded;¹¹² that you have no key to the terminology of science and philosophy, to law and international law Latin, and Latin maxims;¹¹³ druggists' Latin, botanists' Latin, physicians' Latin; that you cannot even guess the meaning of the countless technical phrases, familiar quotations, proverbs, maxims, and compendious Latin formulae that are so essential a part of the dialect of educated men that the fiercest adversaries of the classics besprinkle their pages with misprints of them;¹¹⁴ that you cannot study the early history of modern science and philosophy, or read their masterpieces in the original texts;¹¹⁵ that Rome is as remote for you as China; that Virgil, Horace, and Cicero are mere names; that French literature is a panorama without perspective, a series of unintelligible allusions;¹¹⁶ that travel in Italy loses half its charm; that you cannot decipher an inscription on the Appian way, in the Catacombs, in Westminster Abbey, on Boston Common, or on the terrace of Quebec, or verify a quotation from St. Augustine, the Vulgate, the Mass, Bacon, Descartes, Grotius' *On War and Peace*, or Spinoza's *Ethics*, to say nothing of consulting the older documents of English law and institutions, the sources of the civil law, on which the laws of Europe and Louisiana are based, the *Monumenta Rerum Germanicarum*, or Migne's patrologia, or reading a bull of the Pope or a telegram of the German emperor; that, not to go back to Milton and the Elizabethans, who are unintelligible without Latin, you cannot make out the texts from which

¹¹² "Le latin c'est la raison du français."—Vinet; cf. Gildersleeve, *op. cit.*, 34.

¹¹³ Foster, *School Rev.* (1900), 377; Scott, *ibid.*, 498–501.

¹¹⁴ See the works of President Stanley Hall and President Jordan, *passim*; Fouillée, *op. cit.*, 126; Gildersleeve, on Bigelow, *op. cit.*, 9.

¹¹⁵ "I should like my aspirant to be able to read a scientific treatise in Latin, French, or German, because an enormous amount of anatomical knowledge is locked up in those languages."—Huxley, *Technical Education*, 409; cf. 187. Huxley himself was not happy until he got Greek. Half of Whewell's plea for the study of the history of science in *The Culture Demanded by Modern Life* is concerned with antiquity, and many of the authors mentioned in the other half wrote in Latin.

¹¹⁶ Cf. René Doumic, "L'enseignement du latin et la littérature française," in *Études sur la litt. franç.* I; Bréal, "La tradition du latin," *Revue des deux mondes*, CV, 551 ff.

Addison's *Spectator* discourses, you do not know half the time what Johnson and Boswell are talking about; that Pope and all of the characteristic writers of the so-called Golden Age are sealed books to you; that you are ill at ease and feel yourself an outsider in reading the correspondence of Tennyson and Fitzgerald, or that of almost any educated Englishman of the nineteenth century, and even in reading Thackeray's novels; that half of Charles Lamb's puns lose their point; and that when Punch alludes to the pathetic scene in which Colonel Newcome cries "absit omen!" for the last time, you don't see the joke.

If our scientific colleagues, forgetting outworn polemics and on sober second thought, assure us that the jealous requirements of their stern mistress demand this sacrifice, we can make no reply. Let them deal with purely scientific education and with its symbol, the B.S. degree, in their discretion. But let us hear no more of the farce of a literary, a philosophical, or a historical education that omits even the elements of the languages and literatures on which all literary and historical studies depend for men of European descent. Our acquiescence in such a "collapse of culture" is due to our supine and fatalistic acceptance of the disgracefully low standards which the abuse of the elective system and the premature distraction of the socially precocious and intellectually retarded American boy by the dissipations of modern life and society have imposed upon us. Mill may have overestimated the powers of acquisition of the human mind, but he was far nearer right than we are, who bestow degrees on students who have merely deigned to listen to a few chatty lectures on "anything and everything connected with modern life."

The talk of ten or twelve years' ineffectual study of *Latia* and Greek is nonsense or misrepresentation. It is an indictment of human nature and bad teaching, not specially of classical studies. Undisciplined students will doubtless dawdle over anything, from French to mathematics, so long as teachers and parents permit it. But in a serious school one-fourth of the student's time for four or five years is enough for the acquisition, together with the power to read Cicero and Virgil with pleasure,

of more English than classmates who omit Latin will probably learn. It is not a formidable undertaking, except for students whose attention is too dissipated and whose minds are too flabby to master anything that must be remembered beyond the close of the current term. There is and always will be ample room for a reasonable amount of Latin in any rational scheme of studies that extends four or more years beyond the graded schools.

Latin is a necessity in anything but an elementary or purely technical education. Greek is not in this sense a necessity.¹¹⁷ Neither is it a scholastic specialty. It is the first of luxuries, a luxury which no one proposes to prescribe for all collegians, but which ought to be enjoyed by an increasing proportion of those who are now frightened away from it by exaggeration of its difficulty or by utilitarian objections that apply with equal force to the inferior substitutes which partisan advisers recommend in its place. The value and the charm of even a little knowledge of Greek has often been explained,¹¹⁸ and has been repeatedly demonstrated in the courses in beginning Greek offered by American colleges in the past decade. Students of good but not extraordinary ability have, while keeping up their other work, read six books of the *Anabasis* in the first year of study; have completed in three years the A.B. requirements of the University of Chicago, including eight books of the *Odyssey*, two Greek tragedies, and Plato's *Apology* and *Crito*, and have in the fourth year of study read the entire *Republic* of Plato with intelligence and delight. These facts and similar results obtained in other universities are verifiable by any unprejudiced inquirer, and they make it difficult to characterize in parliamentary language the

¹¹⁷ I cannot pause to discuss the misconception of those representatives of science who argue, not quite seriously perhaps, that if only one ancient language is to be studied it should be Greek. This might be true for Mars or China. It is plainly not true for that Europe which was evolved from the Roman empire, and which until the second or German Renaissance received the inspiration of Greece mainly through Latin literature.

¹¹⁸ See Jebb, *op. cit.*, 575-80; "A Popular Study of Greek." President Mackenzie, in *School Rev.* (1908), 376, adds the weighty suggestion that those "who do not possess these weapons of a full Christian culture" will tend to read only what is easy and avoid scholarly works that contain even a few Greek words or Latin quotations.

persistent misrepresentation that eight or ten or twelve years' exclusive study of the classics yields no results comparable to those achieved by the normal student in other studies. In the light of this experience no fair-minded dean or judicious adviser of students already biased by unthinking popular prejudice can refuse in Lowell's words to "give the horse a chance at the ancient springs" before concluding that he will not drink.¹¹⁹

¹¹⁹ *Latest Lit. Essays*, I, 53.

THE RATIONAL STUDY OF ENGLISH GRAMMAR¹

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Teachers of English grammar are obliged to work in face of the disquieting fact that as a branch of science their subject is very imperfectly grounded. In Greek and Latin grammar one can feel that one's teaching, however elementary, is fairly sound science as far as it goes. One can "settle *ὅτι*'s business" once for all. But in English grammar teacher and pupil are certain to fetch up in ambiguities which show them to be working with definitions that are not critically valid. It hardly excuses this state of things to say that a living speech such as English is not to be brought within formulas and logical categories. The fact that a subject-matter is non-logical does not warrant bad logic in our reasoning about it. This is doubly the case with English grammar, since in the modern view of language-study it is valued less as making for correctness of speech than as affording a discipline in thinking. Thus the Committee of Fifteen dwell in their report on its "discipline in subtle analysis, in logical division and classification, in the art of questioning, and in the accomplishment of making exact definitions." Logical definitions and classifications, however, are precisely what English grammar lacks, so that we must regard such language as describing, not the present status of our subject, but its ideal. English grammar will gain full standing as a discipline and a science only when its teachers and textbook writers address themselves to a first-hand survey of the facts of actual English speech. And this survey, I believe, will be guided by the demand that grammatical statements of the facts of speech shall reflect the more modern view of the facts of thinking.

The confused and uncertain procedure of English grammar-study appears at the outset in the distinction of the four cardinal

¹ Read before the New England Association of Teachers of English.

parts of speech: noun, verb, adjective, and adverb. In an inflected tongue the distinction of these terms is, of course, primarily a matter of etymology. Thus the words *bellica*, *belli*, in *bellica gloria*, *belli gloria*, though alike in meaning and function, are classed as adjective and noun respectively on the ground of their forms. In English, on the other hand, since inflections are few, the grammarians rightly insist that distinction of parts of speech shall rest upon function. One after another of the best recent grammars prepares the pupil by explicit statement to look solely to construction, to the part a word plays in the sentence. They encourage him to believe that clear wits and attention to syntax will make parsing a simple logical exercise. But the pupil who takes them at their word will come to wreck at once. To begin with, he will find a "noun" defined, not in terms of the part it contributes to sentence-structure, but in terms of its meaning; as a word that *names* something—as if an adjective did not just as truly name a quality as does its corresponding abstract noun. The one characteristic function of a noun may, indeed, be brought in by the back door in some such remark as that "the subject of a sentence always contains a noun or noun-equivalent"; but there is no explicit statement of subject-function as a criterion. Indeed there is no real intention of taking function as a criterion, since the genitive forms that remain from the flectional nouns of the older language are still religiously classed as a case of the noun, although they change both its function and its meaning. Thus while *John* may name a person, *John's* denotes a relationship to that person, and in "*John's Gospel*" has the same function and meaning as the adjective "*Johannine*." Yet our grammars, without a word of warning, drop the appeal to function, and call *John's* not an adjective, but the genitive form of the noun. Much the same confusion arises in the classification of adjectives and verbs, on which I shall not dwell. My insistence thus far on the evident inaccuracy of these terms is not because, like Jack Cade in the play, I would have no men about that talk of a noun and a verb; for I believe that, with a frank warning to the pupil, the terms can conveniently be retained for certain limited and

historical aspects of words. But it seems wholly mischievous that pupils should first be put on their mettle to use a classification logically, and then be "fubbed off" with an ambiguous makeshift criterion that makes logical thinking impossible.

The prevailing emphasis on "parts of speech" works a still further mischief. It fosters the mistaken notion that words as parts of speech are the primary thing in language, and that sentences follow as almost mechanical products of word-joining. This idea of language reflects an antiquated conception of the nature of thinking. Old-fashioned logic, for example, would see in such a sentence as "If wishes were horses, beggars could ride," the product of three wholly different activities of the mind. Jevons describes these as (1) simple apprehension, the act of mind by which we come to have the detached ideas, *wishes*, *beggars*, *ride*, etc.; (2) judgment, the act of bringing two ideas into a certain relation; as in "*Beggars ride*"; and (3) reasoning, the act of combining judgments to bring about an inference. This conception of the triple nature of thinking is now quite discredited. Logic has had to restate the facts of thought from the evolutionary point of view. Instead of conceiving different kinds of thought-elements that are joined externally, part to part, it views the thinking process as in its nature one and the same throughout. Simple and complex stages of the process may indeed be distinguished; but the higher, complex forms of thinking are viewed as developing out of the simple judgment, very much as an organism develops out of the cell.

Now it is time that the grammar of living speech should be rescued from its status as a pre-Darwinian science. If the simple judgment is to grammatical logic what the cell is to biology, that fact should appear in our account of the fundamental relations of syntax. These relations are, of course, those obtaining between subject, predicate, and their attributive and adverbial modifiers. Conventional grammar represents them as the product of three distinct functions: the predicate being said to "assert"; adjective terms, to "describe" or "qualify"; and adverbial terms, to "modify." As a mere matter of names there is no harm, and perhaps some convenience, in these dis-

functions; but they should not be allowed to obscure the fact that at bottom the three functions are one and the same. For example, in such a typical sentence as "Still waters run deep," the pupil should see not only the explicit assertion expressed by the predicate, but also the fact that subject and predicate are each in its turn formed by an implied assertion, namely, that "some waters *are still*," and that "their running *is deep*." Adjective and adverbial terms, in short, are simply modified predicates; and the sentence, whether simple or complex, develops as an organized whole by explicit and implied acts of judging in all its parts. Such a view of syntax will of course call for some attention to the speech-equivalents of concepts, since the sentence can equally well be thought of as answering to an analysis of a complex but relatively vague "germ-concept" into its conceptual parts. But concepts themselves can be described simply as mental legal-tender, valid for their meanings because in each case they are convertible into a set of judgments. The pupil who thus approaches the sentence first as a little system of judgments formed into a unit of discourse will learn once for all that it is not words that are added together to make sentences, but sentences that organize words to express their judgment-elements.

The next step, after fixing upon those members in the sentence whose relations give it sentence-form, is to make clear what are the resources of speech for expressing relations. Here may profitably be made the broad distinction among words and parts of words, between what Professor Earle calls "the presentive and symbolic." "Presentive" words and word-elements are those (such as *king, wave, orange, sweet, loud, strike, necessity*, and the syllables *-dom, -ism*, in *kingdom, heathenism*) which present to the mind its ideas. "Symbolic," or, better, "relating," words and word-elements are those (such as *some, on, not, since, shall*, and the syllable *-ed* in *sounded*) which express relationships as obtaining between ideas. This distinction is so vital to grammar that our language-study is surely at fault in leaving the task of explaining it accurately to psychology and logic. But except for detached comments on prepositions, conjunctions,

and auxiliary verbs, our textbooks let it pass. Professor James² is careful to note that many elements of speech "are nothing but signs of direction in thought"; and that combinations of these elements—such as "*either one or the other*," "*although it is so, yet*"—supply us with "verbal skeletons of logical relation, blank schemes of the movement and adjustment of ideas." Of six recent school grammars, on the other hand, only two call attention to relating words as a class, and both of these fall into inaccuracies in describing them. One says that they "have no meaning by themselves"; the other that "they express thought vaguely or in a very general way." The true distinction of relating words and word-elements is made in Bosanquet's *Logic*,³ where it is noted (1) that they indeed have meanings which may have noun and adjective names: thus *at*, *for*, *to*, express relations which have the names *presence*, *intention*, *direction*; but (2) that instead of naming relations as ideas thought about, they express the fact of relationship between ideas. Their meaning presupposes terms to be related. We can say "*Ye are of the world, and for the world*"; but we cannot say, "*Of is not for*" in the sense that "*Red is not green*." That is, we use relating words to make propositions, but do not make propositions about them.

I have dwelt on this point because until we can bring language pupils to an accurate notion of relating elements we have not prepared them to see the distinctive character of English grammar as compared with the grammar of Latin and other flecational tongues. The first difference to be remarked between an analytic English sentence and a flecational Latin one is that in English the cleavage between presentive and relating elements passes, for the most part, *between* words, where in Latin it passes *through* them. Words, in fact, are neither in English nor in Latin the true units for analysis. It only confuses a boy's grammatical thinking to let him say that *urbs* is the Latin for *city*. *Urbs* means *city* plus a little fringe of context that tells something of its use in the sentence. The Latin for *city* is *urb-*, the presentive "kernel" of *urbs*, since the *-s* and other

² *Psychology*, I, 252.

³ Vol. I, Intro.

flectional endings are simply relating elements, expressing for *urb-* the uses that in English are expressed for *city* by word-order, by stress, and by various relating words.

Since word-order, stress, and even intonation take an important part in English syntax, teachers of English grammar should need no reminder that they deal with a living language, which has its being first of all in facts of utterance, and only at one remove in writing and print. But our whole grammatical tradition is against this point of view. The nomenclature by which we describe grammatical facts we for the most part inherit from the study of Latin, and such is the prestige of names that we heedlessly pass over features native and peculiar to English idiom, simply because they do not find us prepared with their appropriate labels. Thus as to word-order, if in the average school grammar we find it mentioned that the attributive regularly precedes its noun, we shall yet find nothing said of such exceptions as "the day *following*," "the time *being*," "the body *politic*," nor of the fact that an attributive phrase (as in "a day *of grace*") regularly follows its noun. Subject-verb order will be mentioned, but not the fact that we now say "if *war should overtake* us," where in old English and modern German "*should*" is transposed to the end. Inversion of subject-verb order will be noted for questions, but not for such expressions of wish as "*Perish the thought!*" nor for such clauses of condition or concession as that in "Refuseth to hear the voice of the charmer, *charm he* never so wisely."

As to stress, we must probably reckon without our textbook in noting: (1) Its use to mark a word as the predicate. Thus one says "*window open*," meaning "what is open *is the window*"; whereas "*window open*" would mean "the window *is, or is to be, open*." Stress, indeed, may strike in at any point of such a sentence as "*That is my belief*," marking the word it falls on as the logical predicate. (2) The use of even stress with an attributive, as in *waiting maid*, and uneven stress (*waiting maid*) to make the two words a rhythmical unit with a specialized sense.

Not only must word-order, stress, and intonation be recognized in English grammar, but much irrelevant lore now in our grammar-study must go out. Why, for example, should textbooks that define their subject-matter as "the means of expressing relations within the sentence" give space to the subject of gender? Grammatical gender is a thing that does not exist in English, and such distinctions for sex as appear in English nouns and pronouns are purely the affair of the dictionary. Why, again, should we talk of an objective, or even of an accusative and a dative, case in English nouns? If the old flecational dative and accusative had marked real categories of sense we might find the terms still of some logical use. But dative and accusative constructions so merge into each other that even school grammars are dropping the dative; and the resulting "objective" case is scarcely more defensible. A so-called "noun in the objective" is regularly used with prepositions, where it certainly does not mean the "object" of anything. The only certain mark of a case is a case-ending, and to distinguish English cases where the endings are lost is very much like distinguishing frogs by the tails they used to have as tadpoles.

Consider for a moment the following question from an examination for college admission last spring:

What is the case of the second *people* in the sentence ending ". . . it has been pushed by this recent people—a *people* who are still but in the gristle"?

The answer that it is the objective case by apposition with the first *people* depends (1) on the fact that the first *people* is said to be in the objective case, simply because as here used it would in the older language have had a dative ending; (2) on a rule that appositives shall agree in case. But, waiving the question whether *people* repeated here is a true appositive, suppose we ask what agreement in case for English appositives amounts to. The one case-ending in English nouns distinguishes the genitive from the common form for nominative and objective. Now when two nouns are in apposition the rule for the "group-genitive" may put the genitive ending on the second only: as in "*Edward the King's* reign." That is,

in the only instances where this case-agreement could be shown by a case-ending the rule does not hold. The question which I quote was therefore asking for distinctions which are no longer valid. *People* is simply repeated absolutely in order to take the appended extra clause; and to speak of it as in any particular case by apposition is, as Florio would say, "to enterlace a plaine matter with quiddities and ink-pot termes."

The rational study of English grammar, therefore, will begin with judgment as the mental movement that shapes our thinking and gives structure to speech. It will then make clear those primary terms and relations within the sentence which show its judgment-elements, and proceed to a review of the means at the command of speech for expressing relations. This review may well set out from the distinction between presentive and relating elements, in order to open the pupil's eyes to the analytic structure of English as compared with Latin. We shall expect special care in the study of word-order, stress, and intonation as a means for expressing word-relations, since these features belong to English as a living speech and must be studied without the help of textbook writers who, as Dr. Jespersen says, "look at English sentences through Latin spectacles."

Such a procedure will, I believe, open the way to a really scientific account of English idiom. And I believe further that such attention to the logic of common speech will make grammar an inspiring study, in which both teacher and pupil will win an increasing sense of the power and subtlety of the mother tongue.

BIBLIOGRAPHICAL NOTE

Henry Sweet's essay on "Words, Logic, and Grammar" (*Philological Society Transactions*, 1875-76) has done pioneer work in breaking away from the assumptions to which the traditional nomenclature of grammar seems committed. The bearing of modern logic, however, on word and sentence, is best developed in Bosanquet's *Logic* (Oxford, 1888; Vol. I, Introduction and chap. i). The psychology of speech is treated in G. F. Stout's *Manual of Psychology* (Book iv, chap. v, "Language and Conception"), and is applied specifically to syntax in Vol. I, Part II, of Wundt's *Völkerpsychologie* (Leipzig, 1900), a work which affords our subject a fresh grounding. Psychological and grammatical categories are compared in detail

in Strong, Logeman, and Wheeler's *Introduction to the Study of the History of Language* (Longmans, 1891). This book (an adaptation to English readers of Paul's *Principien der Sprachgeschichte*) devotes several chapters to syntax. Chap. xvi deals with the actual predicate relation obtaining in attributive and adverbial terms; chap. xx criticizes the division of the "parts of speech." Adolf Stöhr's *Algebra der Grammatik* (Leipzig and Vienna, 1898) is an original and suggestive effort to present facts of syntax in formulas that are free from the special associations of any one language. The distinction of presentive and relating elements is dwelt upon, though not accurately, in John Earle's *Philology of the English Tongue* (Oxford, 5th ed., 1892). A more scientific treatment of the comparative resources of inflected and analytic speech is given in Otto Jespersen's *Progress in Language* (London, 1894). In his St. Louis address on the "History of the English Language in Its Relation to Other Subjects" (*Englische Studien*, Vol. XXXV, 1905) Professor Jespersen makes a clear and convincing protest against the effort to describe modern analytic constructions in terms derived from the study of Latin. The question is a live one, since the *Interim Report* of the British Joint Committee on Grammatical Terminology (Professor E. A. Sonnenschein of Birmingham, chairman) has advised the use of the Latin case-names in English grammar. An excellent approach to the whole subject is afforded in chap. v ("Semantic Change") in Hans Oertel's *Lectures on the Study of Language* (Scribner, 1902). E. P. Morris' *Principles and Methods in Latin Syntax* (Scribner, 1902) is valuable to students of other grammar than Latin, for it goes repeatedly into fundamental questions of grammatical procedure.

RECITATION AND STUDY

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Not long ago a parent remarked to me: "My boy is accustomed to claim considerable of my time and energy each evening helping him in preparing his lessons to be recited at school the next day. It seems to me it would be much more helpful to the boy and more satisfactory to us parents if the teachers would do the teaching at school and let us hear the recitations at home." The feeling of this parent is probably shared by many who give the school work serious thought. Such an attitude is not one of irascible complaint, but is merely that of frankly questioning the effectiveness of teaching as commonly conducted in our public schools.

I have no desire to quarrel with the traditional school. The school of the past has contributed too much to the school of the present to allow one to be at all unappreciative of what has been done. Yet the past had its problems; and so has the present. It is in the interests of more effective school work that I wish to consider the function of the class hour. The question is: How can the teacher do most for the pupils while they are in class?

In the traditional school, and indeed in most schools at present, the class hour is the recitation period. School work in any subject is usually divided into three parts, occurring in the following order: (1) assignment by the teacher; (2) study by the pupil (at his seat or at home); (3) recitation by the pupil to the teacher. These three parts rest upon three principles tacitly assumed: (1) that the first work of the teacher is to determine the character and scope of the lesson to be studied by the pupil—to prescribe this for the pupil exactly as the physician prescribes medicine for his patient; (2) that the pupil derives his chief benefit from private study of the lesson assigned—except as he can profit by the considerate

helpfulness of some one aside from the teacher; (3) that the effectiveness of the pupil's study must be tested very frequently by a sort of examination usually known as the recitation.

The making of assignments undoubtedly fails to receive its due attention. In the first place assignments are usually given at the close of the recitation period, and at that time are liable to be hastily given. Too many teachers see in the assignments nothing of a serious problem in study, and so make them most easily, not to say carelessly. For example:

Study definitions and rules on page 86-87, and work out the exercises on pages 87-88. Bring in on paper the last four problems.

Again,

Read the next ten pages in the text; also, one of the following references:

Bring in a map, drawn by yourself, showing the location of the two armies at this time.

There are three very serious objections to that sort of assignment.

In the first place, the textbook cannot be assumed to be, as is claimed for patent medicine, suitable to all without an analysis of individual cases. It has been used to a very large extent in just this way. But it consists of a logical arrangement of subject-matter, excellent for ready reference, but not necessarily suited either to individual students or to individual lesson units. If the teacher has his own problems to be worked out through the text, the text cannot be assumed to be an all-sufficient guide. Yet it is easy to let a mechanical textual assignment crowd out the more difficult but more profitable assignment of a problem suited to the needs of the class.

Just here is the second serious objection to such assignments, viz., the demoralizing effect on the teacher. Real teaching rapidly deteriorates under such conditions. If there is one influence tending to make teaching mechanical and empty, it is found in the assignment given as a mere task rather than for the purpose of working out an important problem.

The third objection to the formal textbook assignment is the unwholesome influence on the attitude of the pupil, who too frequently feels that such an assignment is only an arbitrary

task in the daily grind of school work. Why should the facts related in these ten pages be learned? Of what consequence to him is the working of the exercises on pages 87 and 88? With such questions in mind, how small the inspiration to study vigorously!

Teachers are frequently in error in giving no attention to what the pupils do between the time of the assignment and the next meeting of the class. I recently asked about three hundred high-school pupils to answer in writing two questions: (1) What was the assignment for this class? (2) What did you do in studying the lesson assigned? The reports reveal a deplorable condition. They show, first, that the teacher's assignment made no very definite impression on the pupils. This part of the teacher's work must be judged not so much by his actual assignment as by the impression he makes on his pupils. In her book on *The Nature of Logical Study* Dr. Earhart shows how empty is this study by most pupils. One needs only to examine closely the work of one's own pupils to be led to see how ridiculous, if not how pathetic, are the efforts of pupils to study. They read the lesson; they learn the facts; they make outlines; they "think"; but beneath all one cannot but feel that most pupils are doing in a merely perfunctory way what they anticipate will be required of them in the recitation. The pupils must not be blamed. They usually meet the standard set by the teachers. Most pupils in our public schools do very little really hard work upon assigned lessons. And why should they do more? There is no strong motive for doing so. The pupils feel no problem inviting them to study. Their only incentive to study is to prepare for the rather formal recitation in the class hour.

Here is a third serious error on the part of many teachers, viz., devoting practically all the class hour to hearing the recitation. What is the function of the recitation, as such? It is evidently largely used as a means of testing the efficiency of the pupil in his study. A good recitation is evidence of good application on the part of the pupil. A poor recitation frequently provides the teacher with an opportunity of "explaining" the subject. We must not overlook the value of oral

recitation before one's classmates. But the thoughtful man cannot but ask if the teacher is doing most for his pupils by assigning them tasks and then merely testing their ability in terms of that assignment. In assignment and recitation there is little opportunity for teaching. Yet many teachers are on the lookout for the times when students stumble as *the* times to teach, to assist by means of "explanations."

In concluding this brief criticism of the traditional method of work, I cannot but approve of the conclusion of the parent cited at the opening of this paper, that *the present arrangement of school work throws the burden of actual teaching on someone other than the teacher, while the teacher serves mainly as the one who tests the student for advancement made.* Assigning tasks and then testing their performance by means of recitation is not teaching. Our traditional schools make little if any provision for real teaching.

In contrast to the method just described, in which recitation largely dominates in the class period while study is carried on almost wholly outside of the class, let me state my position rather abruptly: *Recitation may well be reduced to a minimum if study begun under the teacher's direction be increased to a maximum.* There may be found here and there some theory and some practice in line with this position. McMurry's *Method of the Recitation* and also some texts inductively arranged suggest study as a part of the class hour. In the practice high school conducted by the School of Education at the University of Missouri, considerable emphasis has been laid, for the past four years, on the importance of the larger portion of the class hour being spent in study under the direction of the teacher. The work is greatly handicapped by the inexperience of the teachers, but the results justify the emphasis on this method of work. Our plan is to spend approximately one-third of the class hour in recitation, then the larger portion of the remaining time on study, reserving sufficient time at the close for definite assignment. In practice, however, there is a decided tendency to dwell upon the recitation and allow too little time for study of the advanced

lessons. Until teachers become accustomed to this change of emphasis, much direct attention to the time element is needed. A vigorous adherence to this policy soon brings both teacher and student to find more interest and more profit in class study than in class recitation.

Our discussion of this plan of class work may be taken up under the same topics as were used in the adverse criticism of the traditional plan: study, assignment, recitation.

It is not intended that class study shall be substituted for home study. Rather, it is proposed that this class work shall prepare the pupil for more effective home study. Just here is a danger against which teachers must be on their guard. Pupils are prone to feel that if four propositions in geometry have been studied in class they need not be studied further at home. But class study must not go into the full details. It must lead the pupil to face the problem, to see the method of attack; then leave to the pupil the completion of the study at home. The method of class study must be the best method of home study, except that the class is working together under the direction and inspiration of the teacher.

One great result of class study is thus the training in right habits of study. This is the highest type of teaching. Reference was made above to the fact that pupils actually do not study much alone. This is not because they are not able or not disposed to study, but simply because they have not yet learned how. Even adult teachers are far from the mastery of the art of study, but their acquaintance with the subject-matter and with possible problems gives them an advantage.

What do we mean by study? A boy comes to a small stream. He wishes to cross it. He faces a real problem, that of freeing himself from an unsatisfactory situation and placing himself on the other bank, so that he may proceed on his course. He must now devise ways and means to this end. This is study: a conscious mental effort to acquire the means to accommodate himself better to his environment.¹ The usual

¹ For further consideration of the factors that enter into study, see Professor F. M. McMurry's *How to Study*—a most valuable contribution to pedagogical literature.

assignment fails to present such a real problem to the pupil. It was noted above that one of the most glaring defects in the supposed study by pupils is the lack of a definite problem in the lesson assigned. In the traditional school this problem may be formally stated: for example,

Read pages 104 to 112 to see what contribution the Albany Congress made toward effecting a closer union between the colonies.

But the mere statement of such a problem is usually meaningless to public-school pupils until under the teacher's guidance they have been led to raise questions for themselves. To prepare for studying the Albany Congress as a lesson in history, the pupil must be led to wonder what was the unsatisfactory situation among the colonists that called for such a congress. Why do boys wish to "get together" when a scheme for mischief or for service is being planned? What are some of the conditions necessary for union in purpose and effort? In what frame of mind must a boy be to yield readily to the will of the majority? Such questions, especially those of a practical nature, applicable to the pupils themselves, put the pupils into an inquiring frame of mind. This is the very basis for study. It takes time and skill, especially in treating our rather formal school subjects, to bring the pupils into that frame of mind. The initial step in such a process must not be expected of immature pupils. Here is the test of teaching. To select historical data to be studied calls for no great ingenuity on the part of the teacher. Merely to acquaint themselves with such data requires little work by the pupils. But finding in such data an essential problem and leading the pupils to realize its importance gives to the class hour a character seldom found in public-school work.

I cannot but maintain at this point that in following our stereotyped course of study found in most public schools it is difficult, if not impossible, to lead the pupil to a problem which seems to him worth studying. For example, the usual high-school text in mediaeval and modern history includes several pages descriptive of the reigns of several of the kings of France immediately after the Norman Conquest. I do not won-

der that second-year pupils find such history uninteresting and unprofitable. In such cases we must expect the problem to be perfunctory and the pupil to go to his study with no impetus for vigorous application.

After real class study the pupil is ready for the assignment. This is no longer in terms of pages or exercises. Such an assignment as this may be made for a lesson in history:

1. Find further evidences that the colonists were in need of a closer union.
2. Arrange all this evidence into a convincing argument.
3. Supplement the text by at least one good illustration of efforts to secure a closer union in some phase of present life.
4. Read pages 112-16 and 120-26 in the text for information as to the attitude of the colonists immediately following the Albany Congress. (This is in anticipation of "class study" at the next meeting of the class).

Such an assignment is not new material for the pupil. It is required only to supplement the study already done in class. Now, not only the increased interest in the problem itself, but the demand of the teacher for a higher standard of work, leads the pupil to apply himself more assiduously to his task.

It was asserted above that if the efficiency of study under the teacher's direction were raised to a maximum the importance of recitation could be reduced to a minimum. In many schools the schedule seems to indicate that the pupil is expected to devote from as much to twice as much time in preparation for a lesson as is spent in class-room recitation. Under such a schedule, and with the usual type of assignment, it is no wonder that recitations, as such, are so poor and consume so much time. How many minutes are needed to give a rigorous demonstration of four propositions in geometry, *if* the preparation has been well done? I must not be misinterpreted as detracting from the value of the recitation. On the contrary, I am endeavoring to insist that the standard of the recitation be greatly raised. Oral recitation under the impetus of natural competition among fellow-students is a most wholesome exercise. But the recitation must rank as subordinate to study in its value to the individual.

SOME FUNDAMENTAL PRINCIPLES OF JAPANESE EDUCATION

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The western world has always greatly admired the persistent and universal enthusiasm with which the Japanese "apply themselves unto learning," and all the world has greatly marveled at the patriotic devotion with which the whole people has given itself to war in the defense of the nation's life. It has been apparent that some deep-seated spring of inspiration has been drawn on by every soul in the empire, that some leaven has been at work on the very molecular structure of the social organism, to achieve so thorough and complete a unanimity of purpose in a whole people. This has been attributed to religion, but no religion is so universal as this devotion would imply; and Buddhist, Confucian, Taoist, Christian, and atheist differ not one whit when it comes to this matter of devotion to education and the advancement of the empire.

Among all the social and psychic forces which have been cited as responsible for this splendid attitude, there is one document, the Imperial Rescript on Education, of such far-reaching importance as to deserve the most careful appreciation on our part. It is one of the world's great documents and there are few enough of such powerful instruments in the treasures of the Occident.

It was my very good fortune to travel as one of the representatives of our government on a long tour of nearly eleven thousand miles back and forth across our continent with the Honorary Commercial Commissioners of Japan during the autumn of 1909. The Japanese party consisted of about sixty financiers and business men, divided into groups according to

their various interests. One of the leading men of the party was Baron Naibu Kanda, professor of English in the Peers' School of Tokyo, and one of the leading literary men of Japan. Baron Kanda came as a boy of eleven to this country, thirty-odd years ago, one of the first of that long list of youths who have come to us eager for our education. He graduated from a high school and from Amherst College, with honors, and speaks and writes our language like a native.

Baron Kanda was most interested in our educational institutions, and as the American member of the party assisting the educational group I had a good opportunity to observe the Japanese attitude toward educational ideals. The baron brought as his chief message to our universities, colleges, and schools the Imperial Rescript on Education. Wherever he addressed the students he told them the story of the rescript and the part it plays in Japanese life.

The copies of the rescript he brought were artistically printed on fine Japanese paper suitable for framing, one half of the page being a copy of the original in the Japanese characters, the other half a translation into English. (The baron was one of the committee chosen by the government to put the rescript into literary form in English.) At the close of each address to American students the baron presented to the school the copy of the rescript from which he read, so that it could be framed and hung where it might be read and reread by successive generations of students.

From Baron Kanda's many presentations and comments it became clear that this rescript plays a very important part in the current thought in Japan. It is the Lord's Prayer, the Ten Commandments, and the Declaration of Independence, all in one. It is read with veneration in every school, as part of the daily exercises. On a public occasion, such as a celebration or the laying of a cornerstone, it is read as part of the ceremony. It is memorized by every boy, and it has the unqualified reverence of every individual in the nation.

The text of the rescript is as follows:

IMPERIAL RESCRIPT ON EDUCATION
OF THE
EMPIRE OF JAPAN

Know ye, Our Subjects:

Our Imperial Ancestors have founded Our Empire on a basis broad and everlasting and have deeply and firmly implanted virtue; Our subjects ever united in loyalty and filial piety have from generation to generation illustrated the beauty thereof. This is the glory of the fundamental character of Our Empire, and herein also lies the source of Our education. Ye, Our subjects, be filial to your parents, affectionate to your brothers and sisters; as husbands and wives be harmonious, as friends true; bear yourselves in modesty and moderation; extend your benevolence to all; pursue learning and cultivate arts, and thereby develop intellectual faculties and perfect moral powers; furthermore advance public good and promote common interests; always respect the Constitution and observe the laws; should emergency arise, offer yourselves courageously to the State; and thus guard and maintain the prosperity of Our Imperial Throne coeval with heaven and earth. So shall ye not only be Our good and faithful subjects, but render illustrious the best traditions of your forefathers.

The Way here set forth is indeed the teaching bequeathed by Our Imperial Ancestors, to be observed alike by Their Descendants and the subjects, infallible for all ages and true in all places. It is Our wish to lay it to heart in all reverence, in common with you, Our subjects, that we may all thus attain to the same virtue.

The 30th day of the 10th month of the 23rd year of Meiji.

(Imperial Sign Manual. Imperial Seal.)

DISCUSSION

CRIBBING AND THE USE OF PRINTED TRANSLATIONS: A REPLY TO MR. SKINNER

(*School Review*, September, 1910, pp. 488-90)

I should like to cross swords with Mr. Skinner, and ask him whether his difficulties can be solved in any other way than by a study of the mental processes concerned in the forlorn story which he details. It is certainly a grave situation which he exposes.

The teacher's aim, it appears, is to cultivate *Sprachgefühl*—sensing the meaning of a passage without the aid of the English equivalent. Mr. Skinner complains that his students are reluctant to cultivate *Sprachgefühl*; that they want to know the "English equivalent," and if they can get it at once, without turning over the pages of a dictionary, they are smart enough to save the time, "receiving as much credit as if they had worked with a dictionary."

And he proposes to stop this practice, by the threat of punishing such naughty boys, depriving them of credits if he finds entries in their copies of the text!

I know that in my own country there is still far too much of this crude, seventeenth-century pedagogy, but I rubbed my eyes when I found it issuing from an enlightened university in a western state of America.

Surely the entire blame rests with the teacher, who diligently trains his scholar to make these associations between the native and the foreign symbol, and then blames him because, most sensibly as it appears to me, he seconds his teacher's method by making the association as perceptual as possible. Mr. Skinner deplores that a scholar scribbles *house* on the margin in order to remember that he must say *house* when he sees *Haus*. Now, does Mr. Skinner want his scholars to consider the American *house* to be the equivalent of the German *Haus*, and perhaps the American *housewife* as translatable into the German *Hausfrau*? If he does, he is not teaching them German, as Germans feel it or think it; he is not teaching *Sprachgefühl* at all, but the very opposite. The "mental degeneracy" he deplores is not a fault of his scholars, but a direct result of false principles of foreign-language acquirement, starting with the very first lesson. If we desire our pupils to feel and think when reading German as the native feels and thinks (this, of course, is what is meant by *Sprachgefühl*), we must lay the foundation for this achievement by starting *from the outset* with direct association between foreign symbol and foreign idea, and com-

pel the association between foreign symbol and native symbol to sink first to the margin of consciousness and then below the threshold entirely.

I need hardly labor the point. These principles of direct association were empirically taught many years ago in the United States by Fräulein Wenckebach and many other distinguished instructors; from them I pass on to Vietor, Max Walter, and other German teachers, who since those days have given a scientific basis to these "direct" principles by referring them to the familiar and inevitable laws of suggestion and habit. With all deliberation I can assert that there is no question here of "the natural inertia and sloth of our academic youth," but of the inertia and sloth of the academic teacher who declines to study mental process and then complains that the literal translation habits fostered in the elementary course in German refuse to blossom out into *Sprachgefühl*! There is no surer evidence of failure in teaching than to display contempt for the sloth or stupidity of young people. Our predecessors in the old days flogged the boys who "cribbed"; we are now reduced to scolding them!

I will not take up your space by arguing the problem in detail. There can be very little doubt that in days to come it will be a sign of degeneracy in any university department of modern languages if the instructor is compelled to employ the native tongue of his scholars during class hours.

One deplorable result of the difficulties encountered by this neglect of reform is exposed in the last paragraph of Mr. Skinner's communication: his scholars are not to be permitted access to the best "modern material" because such works are sure to be translated! And he mourns that he cannot put an embargo on our classic English renderings of Lessing, Goethe, and Schiller! He may rest assured that if he will train his scholars scientifically to think directly in German they will not *want* to translate either modern material or the earlier classics, but will delight themselves in real reading of *foreign literature*; and the only dictionary they will care to use will be one of the character described in a subsequent page of the September issue (Sanders' *Wörterbuch*). Such an achievement is in no way remarkable. It can be witnessed in all good secondary schools on the Continent: best of all, no doubt, in Holland, Belgium, Denmark, and Sweden, where a decent mastery of foreign literature is essential to culture; and the same can be seen in a few English schools where skilled teachers have adopted thoroughgoing principles of reform. What astonishes myself, as an outsider, is to find that in the United States, where the teacher is so free from the bondage of tradition and in other spheres so ready to undertake investigation, this refusal to apply the commonplaces of psychology to the teacher's work should still be in evidence.

It may be that my downright criticism will provoke the anger of teachers of repute. I have before me the Report of a distinguished Committee on Modern Languages (*United States Commissioner's Report*, 1897-98, chap.

xxvi), but it is not too much to say that the psychology underlying that Report (I refer particularly to sec. iiiii) would not be accepted today in any reputable university. It is remarkable that such an important document was drafted without a survey of the results accomplished on the continent of Europe, and still more remarkable that no attempt was made at expert psychological analysis of the mode in which thousands of immigrants enter the United States and acquire English year by year without any assistance from instructors. If there are laws of mind at all which control this operation, such laws cannot be banished from the school, however diligently they may be ignored by the academies. And much has been witnessed since that Report was issued: both psychology and pedagogy have made rapid advances. I venture to think that if a dozen educated laymen, or teachers not committed to traditional views, were to undertake a survey into the results of modern-language teaching in Europe, the Report of 1898 would be discarded.

I have been moved to join in this discussion because Mr. Skinner's communication affords the most striking *exposé* of the failure of the "old school" that I have met with for a long time; and I must apologize if my hasty reflections have been expressed with undue animation.

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EDITORIAL NOTES

School authorities are giving increasing attention to the subject of drawing in secondary schools. This is evident in the space and equipment

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SCHOOLS**

provided in almost all new high-school buildings, in the search for good teachers, and in the continual inquiries regarding courses and reasonable standards of attainment.

This increase of attention is all the more significant because the greater number of inquiries by educational authorities indicate that the growing recognition of the subject is based not so much upon results already produced or clearer views of the ends to be attained as upon a general feeling that the subject contains more valuable educational material than has yet been put into usable form for schools.

Drawing in high schools has suffered because it has often been taught by specialists who know little of the relation of the subject to the whole field of education and who teach it after the traditions of art schools. A specific instance of failure to appreciate the nature of the educational process is seen when the instructor with all good intention dissociates art from the pupils' current experiences lest it lose its charm, and when he makes it largely a decorative representation of things as they might be without much serious study of things as they are. In more concrete terms, the opportunities offered by the sciences for obtaining mastery in representing facts in a way that justifies itself in the minds of the pupils are often overlooked. Furthermore, pupils very generally are taught to represent nature only by large masses decoratively composed and colored. It is true that great painters usually approximate this method, but their way of arriving at it is less direct. The complex of nature appeals to them. Through long struggle with detail they learn to embody its effect in a few simplified lines and masses. These simplifications differ from the poster style common to high-school work in that they are a masterful generalization of and not an escape from details. The broad masses of the artist are full of meaning because they are the outcome of experience. Therefore they differ much from adopted stylistic conventions.

It would indeed be unfortunate if drawing in high schools were restricted to its use as a means of illustration of the sciences, and it is true that the time devoted to drawing is not sufficient to enable the pupils to go far toward simplifying nature's complexity without more suggestion than their own experiences can provide. The purpose of these paragraphs is to say that the present need in drawing in the majority of high schools is for a more serious effort to interpret visual sensations, to determine and record what

produces the impression in any given case, and so to develop ability to master given problems of shape, color, illumination, texture, and composition. Works of art gain new meaning when used in this connection as reference material for suggestions of the ways in which artists have produced effects.

Pupils may study drawing in order to gain acquaintance with the vocabulary which art uses and thus be able to understand that means which the race has used to record emotional experience, or they may intend to use the language as a means of expression of their own experiences. In any case, the most valuable practice of drawing is as a means of showing real shapes and structures and of making clear, interesting, and sincere interpretations of facts and experiences.

WALTER SARGENT

BOOK REVIEWS

How We Think. By JOHN DEWEY. Boston: D. C. Heath & Co., 1910. Pp. vi+224. \$1.00.

In this book Professor Dewey renders an important service to educational theory and to philosophy. It is that rare kind of book in which simplicity is the outcome of seasoned scholarship in diverse fields. Logical, psychological, and educational theory are made to contribute to a work which is intelligible to the layman. Its purpose and character are indicated in this passage from the preface: "Our schools are troubled with a multiplication of studies, each in turn having its own multiplication of materials and principles. Our teachers find their tasks made heavier in that they have come to deal with pupils individually and not merely in mass. Unless these steps in advance are to end in distraction, some principle that makes for simplification must be found. This book represents the conviction that the needed steadying and centralizing factor is found in adopting as the end of endeavor that attitude of mind, that habit of thought, which we call scientific."

The three parts deal respectively with "The Problem of Training Thought," "Logical Considerations," and "The Training of Thought." At the outset the author discriminates between the various meanings of "thought," and marks off the kind of thinking with which the book is especially concerned, viz., "*that operation in which present facts suggest other facts (or truths) in such a way as to induce belief in the latter upon the ground or warrant of the former*" (p. 8). Such thinking enables man to escape from purely impulsive or purely routine action; it also enables him to develop and arrange artificial signs serving to remind him in advance of consequences and of ways of securing and avoiding them; and, lastly, it reacts back upon sense-perception, so that, as a consequence of our thinking, things which we immediately experience possess a very different status and value from that which they possess to a being that does not reflect.

Thinking, however, reveals tendencies which need constant regulation. "Natural intelligence is no barrier to the propagation of error, nor large but untrained experience to the accumulation of fixed false beliefs" (p. 21). These tendencies, the more typical of which are set forth, need the regulation which the right kind of education supplies. The business of education is "to cultivate deep-seated and effective habits of discriminating tested beliefs from mere assertions, guesses, and opinions; to develop a lively, sincere, and open-minded preference for conclusions that are properly grounded, and to ingrain into the individual's working habits methods of inquiry and reasoning appropriate to the various problems that present themselves. No matter how much an individual knows, as a matter of hearsay and information, if he has not attitudes and habits of this sort he is not intellectually educated. He lacks the rudiments of mental discipline" (pp. 27-28).

The development of these habits presupposes natural powers, for which curiosity is the most vital and significant factor in supplying the primary

material. This primary material is at the basis of suggestion or intellectual response. The organization of the facts is what constitutes reflective thought. Hence the classification of pupils as dull and bright is apt to be misleading. Hence, also, the notion that thinking is a single unalterable faculty is an error. "Any subject, from Greek to cooking, and from drawing to mathematics, is intellectual, if intellectual at all, not in its fixed inner structure, but in its function—in its power to start and direct significant inquiry and reflection" (p. 39). Because the true nature of thinking is not appreciated, educational practice shows two extremes. One is to ignore the predisposition of the pupil or else follow it too narrowly, forgetting that the pupil's mind is still plastic and unformed; the other is to entertain "an enthusiastic belief in the almost magical educative efficacy of any kind of activity, granted it is an activity and not a passive absorption of academic and theoretical material" (p. 43).

In the excellent chapter on "School Conditions and the Training of Thought," the author discusses the influence of the teacher's mental habits upon the pupils, and the danger of improper emphasis upon either the "logical" or upon the informational aspects of the subject-matter. Conflicting educational views appear once more in connection with the relation of the psychological and the logical. Education is logical in so far, and only in so far, as it concerns "the formation of careful, alert, and thorough habits of thinking" (p. 58). If we ignore the relation of psychological tendencies and logical achievements, we seem obliged to adopt either of two positions: (a) that method consists of various devices for evoking and stimulating native potentialities, to the neglect of organized subject-matter; or (b) that subject-matter, already defined and classified, is the important thing. In the one case we overlook the proper goal of thinking; in the other we forget that "the logical from the standpoint of subject-matter represents the goal, the last term of training, not the point of departure" (p. 62).

Limitations of space forbid a detailed exposition of the remaining parts. Part II, dealing with "Logical Considerations," defines the problem of thinking as "the discovery of intervening terms which when inserted between the remoter end and the given means will harmonize them with each other" (p. 72). In all reflection there is a twofold movement, a movement from fragmentary details, or particulars, to a connected view of a situation (which movement is called induction); and a movement back to the particulars, connecting them and binding them together (the process which is called deduction). Induction is a process of discovery; deduction is a process of testing. Proper training in thinking gives attention to both processes. Undue emphasis upon facts as facts interferes with discovery; while, on the other hand, if the teacher assumes sole responsibility for the elaboration of general principles, or if general principles be falsely isolated from particular facts, the pupil gets no training in the process of testing. Our educational methods must be neither exclusively analytic nor exclusively synthetic. In the teaching of geography, for example, the analytic method starts with concepts, such as solar system or globe, of which the child has but an imperfect grasp; whereas the synthetic method commits a similar fallacy in tacitly assuming that the pupil's knowledge of his environment is essentially the same in kind as that of the adult. "We cannot assume that the portion of the earth already familiar to the child is such a definite object,

mentally, that he can at once begin with it; his knowledge of it is misty and vague as well as incomplete. . . . Not till he has grasped the larger scene will many of even the commonest features of his environment become intelligible. Analysis leads to synthesis; while synthesis perfects analysis" (p. 115). In general, the formation of concepts is a process which always involves both analysis and synthesis.

In the interesting chapter on "Concrete and Abstract Thinking," Professor Dewey distinguishes between the concrete and the abstract by the criterion of familiarity. So far the distinction is a purely individual matter. There is, however, "a general line of cleavage which, deciding upon the whole what things fall within the limits of familiar acquaintance and what without, marks off the concrete and the abstract in a more permanent way. *These limits are fixed mainly by the demands of practical life*" (p. 137). Hence not only sticks and stones, but wages and taxes are concrete. The theoretical, on the other hand, is that which is not intimately associated with practical concerns. It is a matter for regret, in the interests of logical theory, that Professor Dewey does not apply the distinction more at length. While the distinction drawn by him is illuminating within a certain area, there seems to be room for doubt whether it meets all the difficulties that gather about this perplexing topic. When the layman, to borrow one of Professor Dewey's illustrations, says that water rises in the pump on account of suction, thus regarding suction as a force like heat or pressure, we have a fallacy which is ordinarily regarded as a confusion of the abstract and the concrete. It would seem, however, that such a view is not open to Professor Dewey, but that he is obliged to run counter to usage as established in logical treatises. The illustration is used by him merely to emphasize the necessity of analysis, a necessity which is, of course, equally present in all forms of fallacy. The point is that an attribute, quality, or state, such as "suction," or "gravity," or "progress," or "death," when it is set up as a distinct agency dominating the things to which it pertains, is commonly accounted an abstraction, in spite of familiarity or intimacy of relation to practical life. It may be that other criteria, e.g., position in space and time, are equally inadequate to meet all the situations in which we find it expedient to distinguish between the concrete and the abstract. But at all events it is to be hoped that Professor Dewey will at some time indicate how his view concerning the concrete and the abstract squares with other views.

In Part III the distinction between play and work is held to be, not so much the distinction between activity for its own sake and activity for the sake of the product or result, as the distinction between "an interest in an activity just as it flows on from moment to moment, and an interest in an activity as tending to a culmination, to an outcome, and therefore possessing a thread of continuity binding together its successive stages" (p. 164). This latter distinction avoids the danger of too sharp a separation between play and work, as exemplified in practice in the break between the kindergarten and the grades. A true conception of the nature and relation of play and work also gives us a clue to the organization of educative material. "That the elementary curriculum is overloaded is a common complaint. The only alternative to a reactionary return to the educational tradition of the past lies in working out the intellectual possibilities resident in the various arts, crafts, and occupations, and reorganiz-

ing the curriculum accordingly. Here, more than elsewhere, are found the means by which the blind and routine experience of the race may be transformed into illuminated and emancipated experiment" (p. 169). The chapters dealing with the function of language and of recitation offer many valuable suggestions of a positive and of a negative kind; the whole being animated by the conviction that the goal of intellectual education is a habit or attitude of mind which may fitly be called scientific and with which the native and unspoiled attitude of childhood has a real kinship.

A review of the book can do little more than indicate topics and conclusions. It naturally and inevitably fails to do justice to a work of this kind. Professor Dewey's qualifications for the task he has set himself are too well known to require comment; it is sufficient to say that in this book he is even more successful than usual. Teachers of all kinds will find the book a source of stimulus and enlightenment, and they will doubtless give to it the cordial welcome which it so eminently deserves.

B. H. BODE

THE UNIVERSITY OF ILLINOIS

The Education of Women. By MARION TALBOT. Chicago: The University of Chicago Press, 1910. Pp. ix+235. \$1.37 postpaid.

Vocations for the Trained Woman. Edited by AGNES F. PERKINS. Boston: The Women's Educational and Industrial Union, 1910. Paper, \$0.60; cloth, \$1.20.

Dean Talbot's little book is a real contribution to the rapidly growing literature on higher education. While dealing avowedly with the education of women, it asserts as a cardinal principle for all discussion that education is fundamentally a social problem which must be studied and dealt with in its relations to economic and social conditions and development. This position has been taken in much of the recent discussion, but we know of no other place in which it has been set forth so clearly and cogently.

Miss Talbot divides her book into three parts. Part I describes the changes in women's activities—industrial, educational, civic, philanthropic, domestic, and social—during the last hundred years. Part II compares the educational machinery of about fifty years ago with that of today, citing as examples the past and the present curricula of the Boston and the Chicago public schools, of Vassar College, and of the University of Wisconsin, in order to show how far education has adapted itself to these changes. Part III deals with the present collegiate education of women, pointing out its characteristics, limitations, and possible modifications in the light of modern social, economic, and psychological knowledge.

The book is definite although not exhaustive. Its abundance of concrete matter is illustrative rather than comprehensive, and in places the exposition strikes the reader as inadequate. Anecdote frequently replaces argument, and one questions how far these pages of curricula will speak for themselves except to those already skilled in dealing with such material. Yet the writer's intention is evidently to outline a method of treatment rather than to make a

thorough investigation by means of that method. For this purpose the brevity and the concreteness of the book have their own value.

Miss Talbot's account of her experiment at the University of Chicago in making the "occupative interest" serve as the determining motive in the selection of a course of study by young women in the first and second years of college is especially timely and practical. Most of the colleges are now meditating upon the futility of the formal system of faculty advisers for students. New life must be breathed into its dry bones in order to make it in any way a genuine and determining influence. Many of us are coming to think with Miss Talbot that leading the student to reflection upon a career will go far toward making his or her choice of studies more rational, less puerile and accidental. Rightly understood, the encouragement of this "life-career motive," as President-emeritus Eliot recently called it, does not mean the lessening of the liberal and cultural value of a college course nor the introduction of a narrow "bread-and-butter" view of life. It is only the short-cuts to an increased earning capacity that do this. It means rather the psychologizing and socializing of the student's attitude toward his college opportunities. We are coming to see that education fits us, not for an abstraction called "life," but for very definite lives in specific places and with specific occupations, paid or not paid. We have hardly begun to use the "life-career motive" in its richest sense, much as we have heard of late of "vocational education." It is true, of course, that the status of women—social, economic, and political—is more ambiguous and shifting than that of men, and introduces special difficulties into the problem of their education. But the career of daughter at home or even of maiden aunt of leisure—if such ever be of leisure—has its opportunities and responsibilities as well as the careers of the head of a household or the worker in a profession.

As Miss Talbot points out, with the removal of industries from the home women have ceased in large measure to be producers in the home, but they have now the great function of directing how the products of other people's labor shall be consumed. And consumption, the modern economists tell us, is the great economic problem. Training of women for this function should include "a knowledge of fabrics and other materials, of methods of production, of laws governing different industrial processes, of standards of fitness in the article and of efficiency in the workman. It should also include such an appreciation of human needs as will help determine the conditions under which goods are produced and will demand workshops free from disease, prohibition of child-labor, reasonable hours and decent wages for the workman, and simplicity, beauty, and genuineness in every product." Furthermore, with the supplying by the city of many household needs "arises a new duty for women, that of intelligently and effectively co-operating with the other members of the community for the welfare of the individual households." The new "municipal housekeeping," with its plans for improved sanitation, education, recreation, demands for its success the carefully trained intelligence of both women and men.

Miss Talbot suggests certain changes in the curricula of our women's colleges in the direction of preparing for women's special services, domestic and civic. These and others will come in time, but personally I should like to

see first what may be done with the present curriculum as a tool in the hands of teachers alive to modern needs and opportunities and co-operating with students who have been led to do some such thinking about their future lives as is already done by most young people except the favored—or retarded—few who go to college.

A fitting supplement to Dean Talbot's book, although markedly different in plan and purpose, is the volume entitled *Vocations for the Trained Woman*, edited by Agnes F. Perkins of Wellesley College and published in June, 1910, by the Women's Educational and Industrial Union of Boston—an organization devoted to the vocational interests of women. Begun several years ago by the Research Department of the Union as an investigation of the kinds of work other than teaching open to the educated woman, the study has resolved itself into a series of articles on opportunities for women in various fields, contributed by experts, both men and women, in those fields. The preliminary and tentative character of the book is indicated by the words "Introductory Papers" on the title-page. A survey made in this way has both merits and defects. Its merits are concreteness, matter-of-factness, and almost total absence of the doctrinaire or the sentimental. Its defects are inevitable repetition and shifting of scale—too much about some kinds of work, too little about others equally important—and occasional evidence of the fact that the best workers are not always the persons who can write best about their work. But on the whole one is surprised by the solid and authoritative character of the book. It is really amazing to find that college women have already quietly established themselves in so many occupations outside of the traditional occupation of teaching.

The main fields dealt with under various subheads are those of social, civic, and economic service, scientific work, domestic science and arts, agriculture, business, clerical and secretarial work, literary work, art, and special forms of teaching. The conditions described are for the most part those obtaining in Boston and New York, the two large cities studied. Among the experts contributing are Dr. Richard C. Cabot, Dr. Susan Kingsbury, Dr. William H. Allen, Mr. Joseph Lee, and Mr. Robert A. Woods, in the fields of social and economic service; Miss Helen Kinne, of the Teachers College of Columbia University, and Miss Grace White, of the well-known "Sunshine Laundry" of Brookline, in the field of domestic science; President Kenyon Butterfield, of the Massachusetts Agricultural College, and Mrs. Charlotte Barrell Ware, proprietor of the Warelands Dairy near Boston, in the field of agriculture; Miss Sarah Louise Arnold, dean of Simmons College, in the field of clerical and secretarial work; Miss Florence Marshall, of the Boston Trade School for Girls, on vocational teaching; Dr. Walter E. Fernald, superintendent of the Massachusetts School for the Feeble-Minded at Waverly, on the teaching of mental defectives; and Miss Amy Morris Homans, of Wellesley College, on physical education. The paper on women in the civil service, by Dr. Marion Parris of Bryn Mawr College, and the group of articles on women in agriculture show to what an extent women have already entered these relatively new fields.

Each contributor was asked to discuss his topic under the general heads of nature of the work, qualifications and training necessary, opportunities, and compensation. The stress laid on adequate training for nearly all the occupa-

tions discussed is noteworthy. It also inspires confidence to find that not a few already in certain occupations state frankly that there is slight opportunity for newcomers, or, again, that a college education gives a beginner little or no advantage.

In any book by many hands—and in this case with a change of editors besides—it is easy to pick out defects in arrangement and emphasis. Certain occupations may be classified under any one of several heads; several are placed here where they do not seem to the reviewer most obviously to belong. The section on women in applied science is inadequate. A separate article might well have been included in this section on women as technical secretaries and assistants to scientific investigators. The articles on dressmaking and millinery discuss at what seems undue length fields in which outside of teaching there are at present no very real openings for college women. On the other hand, the field of interior decorating is treated far more generally and cursorily than it deserves in view of the success made in it by certain women, especially in connection with departments in large establishments. The business side of the profession is relegated to the background in favor of the art side. Under business, nothing is said explicitly of the new profession of financial secretary, a kind of work which women are performing with conspicuous success in some of the great "welfare" organizations, where a trained "publicity agent" is essential to the education of the public and to the collection of funds. Under special forms of teaching no very clear distinction is made between the mentally defective and the merely retarded or backward; and there are no articles on the teaching of the physically defective—the deaf and dumb, the blind, the crippled. There is no account of the teaching of manual training as distinguished from vocational training. In certain sections, notably the section on women in agriculture, the articles are too largely by authorities representing a single institution. But these and other criticisms are disarmed by the difficulties, limitations, and omissions acknowledged in the preface.

If we are to follow Dean Talbot's suggestion, and call the attention of young women early in their college course to various fields of service in modern life and to the most liberal and thorough ways of fitting themselves for such service, this book is the one above all to which at present we must direct them. It is an initial and important step in the right direction, but much more remains to be done. It is of interest to know that the Women's Educational and Industrial Union, which stands sponsor for the volume, has within the year established an appointment bureau for college graduates to aid them in finding vocational openings other than teaching and to inquire into the character and number of such openings. Several other inquiries have been set on foot, some only indirectly connected with the higher education of women, but all seeking to find out the facts and to suggest ways of approach to new opportunities. They form an important although not spectacular aspect of the "woman movement" of which we hear so much nowadays. In a broader sense they are a manifestation of the great "human movement" of today, to which only those who persistently look backward can be blind.

ELIZABETH KEMPER ADAMS

SMITH COLLEGE

Problems in Wood-Turning. By FRED D. CRAWSHAW. Peoria, Ill. The Manual Arts Press, 1909. Pp. 35.

The book fulfils very satisfactorily the purposes announced by the author in his foreword, namely, to help students of wood-turning by providing a practical textbook, to simplify the subject, to show a reason for handling the tool in a particular way for each cut, and to offer, by good mechanical drawings, a series of excellent problems. In addition to its description of technical principles the book includes practical suggestions on standards of good form.

Landscape Painting. By BIRGE HARRISON. New York: Scribners, 1910. Pp. xvi+254. \$1.50.

Landscape Painting, by Birge Harrison, is an attractive addition to the literature of the subject. It presents in book form the substance of a series of talks on landscape painting given before the Art Students' League of New York at its summer school at Woodstock, New Jersey.

In the opening chapter Mr. Harrison offers some general considerations on the function of art in expressing not only the subject the artist has in mind but also the character of the race and age, and describes landscape painting as not merely the record of individual impressions but as the manifestation of the advancing ability of the race to understand and organize its impressions, so that the painting of today is made possible only by the accumulation of the interpretations contributed by the past.

The author proceeds to describe the elements of good landscape painting. He introduces his discussion of color with scientific observations, and continues with a description of modern progress in ability to express the luminous, vibrating quality of out-of-door effects. He sets forth the importance of constructing a picture in well-related values, and lays a wholesome emphasis on knowledge of drawing as essential to good workmanship and to the charm that can be secured only when the brush work is backed by a sure knowledge of the underlying form. "The poor and uncertain draughtsman fumbling for form loses all quality."

Some of the suggestions on composition appear self-evident and somewhat formal, and likely to lead the young student, who is usually the only person to give them much serious thought, to consider the letter, not the spirit, of the matter. The author, however, gracefully relieves the situation by saying that most of the rules can occasionally be disregarded with advantage.

The chapter on schools sets forth the debt which the originality of a student owes to the work of others and the fact that one individuality inspires another. The discussion entitled "The Subconscious Servant" gives prominence to the truth, too often overlooked, that the artist must not only draw well from nature but must master her types and build up for himself a store of well-understood images and usable memories if he is to do creative work.

The book is full of practical technical suggestions and is admirably illustrated. It is calculated to put the art student who uses it into a working mood and to bring to the untechnical reader a better appreciation of landscape art and that interest in the author's method of presentation which is awakened whenever a man essays to set forth by one medium of expression the processes and standards of another and wholly different medium which is his usual mode of interpretation.

WALTER SARGENT

THE UNIVERSITY OF CHICAGO

Ueber die literarische Erziehung als ein Problem der Arbeitsschule. Ein Beitrag zur Reform des Sprachunterrichts und der Lesebücher und zu einem Leseplan für die deutsche Jugend. VON SEVERIN RÜTTGERS. Leipzig: Teubner, 1910. Pp. x+156. Geh., M. 1.80; geb., M. 2.20.

The present material development of Germany finds its reaction in a rising interest in literary and philosophical education. The little book by Rüttgers is a proof of this. Its aim is to develop literary taste in boys and girls of school age. It is written for teachers in the primary and secondary schools of Germany, and it may be heartily recommended to American teachers of English and foreign literature as a means of learning from the experience of German teachers in similar lines of work. The reviewer wishes to emphasize that American teachers should not, in spite of their own large pedagogical literature, lose sight of the rapid development of foreign, especially German, educational programs. He would strongly advise them to keep in touch with the German movements by reading books like this.

German Students' Manual of the Literature, Land, and People of Germany. By FRANKLIN J. HOLZWARTH. New York: American Book Co., 1910. Pp. 243. With a map. \$1.00.

Selections from Early German Literature. By KLARA HECHTENBERG COLLITZ. New York: American Book Co., 1910. Pp. 285. \$1.00.

Holzwarth's brief history of German literature is a very convenient reference book for undergraduate students of German. It is written in a style which will make it also appeal, for occasional reading, to a fourth-year high-school student. It is especially well adapted for an introductory course on German literature such as is given in the third or fourth year of college German. Its value is increased by a map, and an appendix on the German Empire of our times.

Mrs. Collitz' *Selections from Early German Literature* will be a welcome collateral reader for an introductory course on Old and Middle High German Literature. It is considerably shorter than Max Müller's selections from the same field.

Lessings Minna von Barnhelm, oder Das Soldatenglück. Edited with Introduction and Notes by OTTO HELLER. Vocabulary and Exercises by ERNST L. WOLF. ("The Lake German Classics.") Chicago: Scott, Foresman & Co., 1909. Pp. 293.

Schillers Jungfrau von Orleans. Edited with Introduction, Notes, and Vocabulary by PHILIP SCHUYLER ALLEN AND STEVEN TRACY BYINGTON. Boston: Ginn & Co., 1909. Pp. xxxv+334. With a frontispiece.

There is no lack of good editions of Lessing's *Minna von Barnhelm* and Schiller's *Jungfrau von Orleans*, and any new editions must justify their existence by unusual merits. This Heller's and Allen's books seem to do. Both have exhaustive and scholarly introductions and many valuable annotations. Their usefulness is increased by vocabularies. Especial emphasis should be laid on the excellent list of questions in Heller's edition of *Minna*

von Barnhelm. Both books are suitable for third-year college or fourth-year high-school reading.

Lichtenstein. Romantische Sage aus der württembergischen Geschichte.

VON WILHELM HAUFF. Abridged and edited with Introduction and Notes by JAMES PERCIVAL KING. New York: Henry Holt & Co., 1910. Pp. xxxviii+363. Illustrated. \$0.80.

Every German boy reads Hauff's *Lichtenstein*, and there is decidedly a place for this text in the reading material of American students of German. It is a delightful historical novel in the style of Walter Scott's *Waverley* Novels. Its vivid descriptions and lively action keep the interest aroused to the end of the book. It can be read in the third high-school year or toward the end of the second year in college. King's edition is well supplied with pictures, and has a map, as well as a good introduction and adequate notes.

Immensee. Von STORM. Germalshausen. Von GERSTÄCKER. Der Lindenbaum. Von SEIDEL. Edited with Introduction, Notes, and Vocabulary by EDWARD MANLEY. ("The Lake German Classics.") Chicago: Scott, Foresman & Co., 1909. Pp. 197. \$0.50.

Germalshausen. Von FRIEDRICH GERSTÄCKER. Edited with Notes, Exercises, and Vocabulary by A. BUSSE. New York: American Book Co., 1910. Pp. 121. \$0.30.

Anfang und Ende. Von PAUL HEYSE. Edited with Introduction, Notes, Exercises, and Vocabulary by A. BUSSE. Boston: Ginn & Co., 1909. Pp. viii+119. With a portrait. \$0.35.

Ein Nordischer Held. Ein Bild aus der Geschichte. Von RICHARD ROTH. Edited with Introduction, a Brief Outline of Scandinavian History, Notes, Exercises, and Vocabulary, by HELENE H. BOLL. New York: American Book Co., 1910. Pp. 175. \$0.35.

Immensee and *Germalshausen* belong to the regular stock of German reading books for American students. Mr. Manley has united the two in one volume, together with Seidel's *Der Lindenbaum*. The volume is richly supplied with notes and exercises, and a good vocabulary is added. The three stories form convenient reading material for the latter part of the second year of high-school German. Mr. Busse's edition of *Germalshausen* has a large vocabulary and many exercises based upon the text.

Anfang und Ende by Heyse and *Ein Nordischer Held* by Roth are a welcome addition to the conventional intermediate reading texts in German. The present editions are accompanied by explanatory notes, vocabularies, and exercises both for translation and for conversation. It might be desirable that even more new texts be added to the standard German literature read in high schools and colleges.

A. C. VON NOÉ

THE UNIVERSITY OF CHICAGO

BOOKS RECEIVED

EDUCATION AND PHILOSOPHY

- Class Teaching and Management.* By WILLIAM ESTABROOK CHANCELLOR. New York: Harpers, 1910. Pp. xiv+343. Illustrated. \$1.00.
- Principles of Education.* By FREDERICK ELMER BOLTON. New York: Scribners, 1910. Pp. xiv+790. \$3.00.
- Manual of Mental and Physical Tests.* A Book of Directions Compiled with Special Reference to the Experimental Study of School Children in the Laboratory or Classroom. By GUY MONTROSE WHIPPLE. Baltimore: Warwick & York, 1910. Pp. xx+534. Illustrated.
- A History of Education during the Middle Ages and the Transition to Modern Times.* By FRANK PIERREFONT GRAVES. New York: Macmillan, 1910. Pp. xvi+328. \$1.10 net.
- The Care and Training of Children.* By LE GRAND KERR. New York: Funk & Wagnalls Co., 1910. Pp. xvi+233. \$0.75.
- The Concept of Method.* By GERHARD R. LOMER. (Teachers College Contributions to Education, No. 34.) New York: Columbia University, 1910. Pp. 99. \$1.00.
- A Beginner's History of Philosophy.* By HERBERT ERNEST CUSHMAN. Vol. I. Ancient and Mediaeval Philosophy. Boston: Houghton Mifflin Co., 1910. Pp. xxii+406. \$1.60 net.

ENGLISH

- The Riverside Literature Series. *The Rivals.* A Comedy by RICHARD BRINSLEY SHERIDAN. With an Introduction and Notes by JOSEPH QUINCY ADAMS. Pp. xxvi+130. With portrait and map. \$0.25. *Essays on Lord Clive and Warren Hastings.* By THOMAS BABINGTON MACAULAY. Edited by ALLAN ABBOTT. Pp. xiii+223+xxvi. With a map. \$0.40. *The Rise of Silas Lapham.* By WILLIAM DEAN HOWELLS. With an Introduction. Pp. xii+515. \$0.40. Boston: Houghton Mifflin Co., 1910.
- Selections from the Old Testament.* Edited with Introduction and Notes by FRED NEWTON SCOTT. (Macmillan's Pocket Classics.) New York: Macmillan, 1910. Pp. xvi+335. \$0.25.
- Stories of American Discoveries for Little Americans.* By ROSA LUCIA. New York: American Book Co., 1910. Pp. viii+176. \$0.40.
- The Last of the Mohicans.* Adapted from J. FENIMORE COOPER. By MARGARET N. HAIGHT. New York: American Book Co., 1909. Pp. 142. \$0.35.
- Peter of New Amsterdam. A Story of Old New York.* By JAMES OTIS. New York: American Book Co., 1910. Pp. 158. \$0.35.
- Common Words Commonly Misspelled.* By BRUCE R. PAYNE. Richmond: B. F. Johnson Publishing Co., 1910. Pp. 121. \$0.28.

GERMAN, FRENCH, AND SPANISH

- Der Erbförster.* Ein Trauerspiel in fünf Aufzügen. Von OTTO LUDWIG. Edited with Introduction and Notes by MORTON C. STEWART. New York: Henry Holt & Co., 1910. Pp. xlviii+159. With a portrait. \$0.35.

- Heath's Modern Language Series. *Was der Grossmutter Lehre bewirkt.* Von JOHANNA SPYRI. Edited with Exercises, Notes, and Vocabulary by SARAH T. BARROWS. Pp. iv+73. \$0.25. *Die Schildbürger. Ihre Weisheit und grosse Torheit.* Selected and edited with Notes, Exercises, and Vocabulary by FREDERICK BETZ. Pp. viii+126. Illustrated. \$0.35. Boston: D. C. Heath & Co., 1910.
- Le bourgeois gentilhomme. Comédie-Ballet.* By MOLIÈRE. Edited with an Introduction and Notes by M. LEVI. New York: Henry Holt & Co., 1910. Pp. xxvii+175. With a portrait. \$0.35.
- Easy French Prose Composition.* Based on *Contes et légendes, I^{re} Partie.* By H. A. GUERBER. New York: American Book Co., 1909. Pp. 91. \$0.25.
- Perfect French Possible.* Some Essential and Adequate Helps to French Pronunciation and Rhythm. By MARY H. KNOWLES and BERTHE DES COMBES FAVARD. Boston: D. C. Heath & Co., 1910. Pp. x+52. \$0.35.
- Spanish Composition.* By J. P. WICKERSHAM CRAWFORD. New York: Henry Holt & Co., 1910. Pp. iv+127. \$0.75.
- La Barraca.* Novela por VICENTE BLASCO IBÁÑEZ. Edited with Introduction, Notes, and Vocabulary by HAYWARD KENISTON. New York: Henry Holt & Co., 1910. Pp. xiv+325. \$0.90.

CIVICS AND ECONOMICS

- An Outline for the Study of American Civil Government, with Special Reference to Training for Citizenship.* For use in secondary schools. Prepared for the New England History Teachers' Association by its Committee: Ray Greene Huling, Wilson Ryder Butler, Lawrence Boyd Evans, John Haynes, and William Bennett Munro. New York: Macmillan, 1910. Pp. xxx+187. \$0.50 net.
- The Industrial History of the United States.* By KATHARINE COMAN. New and revised edition. New York: Macmillan, 1910. Pp. xvii+461. \$1.50 net.

MATHEMATICS AND SCIENCE

- Secondary School Mathematics, Book I.* By ROBERT L. SHORT and WILLIAM H. ELSON. Boston: D. C. Heath & Co., 1910. Pp. viii+182.
- Practical Algebra. First Year Course.* By JOS. V. COLLINS. Revised edition. New York: American Book Co., 1910. Pp. 301. Illustrated.
- Elements of Plane and Spherical Trigonometry.* By DAVID A. ROTHROCK. Together with Logarithmic, Trigonometric, and Other Tables. Compiled by DAVID A. ROTHROCK. Pp. xiv+147+99. Illustrated. \$1.40 net.
- College Algebra.* By SCHUYLER C. DAVISSON. New York: Macmillan, 1910. Pp. xiv+243. Illustrated. \$1.50.
- Analytic Geometry.* By N. C. RIGGS. New York: Macmillan, 1910. Pp. xi+294. Illustrated. \$1.60 net.
- Textbook of Physics.* By C. E. LINEBARGER. Boston: D. C. Heath & Co., 1910. Pp. viii+471. Illustrated. \$1.25.
- Physics.* By CHARLES RIBORG MANN and GEORGE RANSOM TWISS. Revised edition. Chicago: Scott, Foresman & Co., 1910. Pp. 424. Illustrated. \$1.25.
- Manual of Agriculture for Secondary Schools. Studies in Soils and Crop Production.* By D. O. BARTO. With Introduction by E. DAVENPORT. Boston: D. C. Heath & Co., 1910. Pp. xiv+89. \$0.50.

CURRENT EDUCATIONAL LITERATURE IN THE PERIODICALS¹

IRENE WARREN

Librarian, School of Education, The University of Chicago

- AYRES, LEONARD P. The John F. Slater Fund for the education of freedmen. *Journ. of Educa.* 72:229-30. (15 S. '10.)
- BAGLEY, W. C. The scientific method in educational research. *Nat. Study R.* 6:172-78. (S. '10.)
- BAILEY, H. T. Reasons for teaching drawing. *School Arts Book* 10:19-27. (S. '10.)
- BLAYNEY, T. L. The history of art as a college discipline. *Educa.* 31:21-31. (S. '10.)
- BROWN, J. F. Impressions of the German system of training teachers for the higher schools. *School R.* 18:471-80. (S. '10.)
- BURSTALL, SARA A. Variant types of curricula in secondary schools. *School W.* 12:323-25. (S. '10.)
- CALDWELL, O. W. Natural history in the grades: Sixth grade (6.) *El. School T.* 11:1-7. (S. '10.)
- CHARLES, FRED L. Certain proposed lines of advance in agricultural nature study. *School and Home Educa.* 30:13-17. (S. '10.)
- Children's lives sacrificed to ignorance. *Lit. Digest* 41:380. (10 S. '10.)
- CLOYD, D. E. Student organization in city high schools. *Educa.* 31:17-20. (S. '10.)
- COOK, JOHN W. History of Education (2). *School and Home Educa.* 30:9-13. (S. '10.)
- . Some of the effects of music in the public schools. *School and Home Educa.* 30:17-21. (S. '10.)
- DAVIS, B. M. Agricultural education: educational periodicals. *El. School T.* 11:15-23. (S. '10.)
- DEARBORN, W. F. Experiments in learning. *Journ. of Educa. Psychol.* 1:373-88. (S. '10.)

¹ *Abbreviations.*—*Educa.*, Education; *Educa. R.*, Educational Review; *El. School T.*, Elementary School Teacher; *Journ. of Educa.*, Journal of Education; *Journ. of Educa. Psychol.*, Journal of Educational Psychology; *Kind. R.*, Kindergarten Review; *Lib. Journ.*, Library Journal; *Lit. Digest*, Literary Digest; *Nat. Study R.*, Nature Study Review; *R. of Rs.*, Review of Reviews; *School and Home Educa.*, School and Home Education; *School R.*, School Review; *School W.*, School World; *Sci. Amer.*, Scientific American.

- DOANE, W. C. Contributions to the history of American teaching (6). *Educa. R.* 40:109-12. (S. '10.)
- EDSON, A. W. Instruction of exceptional children in the New York City public schools. *Educa.* 31:1-10. (S. '10.)
- . Observation and practice teaching in the New York City training schools. *Educa. R.* 40:138-44. (S. '10.)
- FLETCHER, A. P. An experiment in industrial education. *El. School T.* 11:8-14. (S. '10.)
- FRODSHAM, M. G. The students' careers association. *School W.* 12:331-34. (S. '10.)
- GREENWOOD, J. M. William Torrey Harris—the man. *Educa. R.* 40:173-83. (S. '10.)
- GRUENBERG, BENJAMIN. William James. *Sci. Amer.* 103:198-99. (10 S. '10.)
- HAWKES, H. E. Mathematics in the college course. *Educa. R.* 40:145-56. (S. '10.)
- HAYS, W. M. How schools and the Department of Agriculture can co-operate (2). *Journ. of Educa.* 72:175-76. (1 S. '10.)
- HOWERTH, IRA WOODS. Instruction by correspondence. *School and Home Educa.* 30:22-27. (S. '10.)
- Is Europe taking religion out of its schools? *R. of Rs.* 42:350. (S. '10.)
- JOHNSON, G. E. The renaissance of play. *Kind. R.* 21:65-74. (O. '10.)
- JUDD, C. H. On the comparison of grading systems in high schools and colleges. *School R.* 18:460-70. (S. '10.)
- . (The) school and the library. *El. School T.* 11:28-35. (S. '10.)
- MARION, G. E. The library as an adjunct to industrial laboratories. *Lib. Journ.* 35:400-4. (S. '10.)
- MAURER, A. H. Football in the high school. *Educa. R.* 40:132-37. (S. '10.)
- MIERS, H. A. Relations between university and school education. *School W.* 12:341-46. (S. '10.)
- MOORE, ANNIE C. Report on storytelling. *Lib. Journ.* 35:404-12. (S. '10.)
- (The) moving picture and the national character. *R. of Rs.* 42:315-20. (S. '10.)
- PALMER, F. H. Correspondence schools. *Educa.* 31:47-52. (S. '10.)
- PATON, J. L. Testing intelligence. *School W.* 12:321-23. (S. '10.)
- Popular appeal of the library. *Lit. Digest* 41:446. (17 S. '10.)
- POULSSON, EMILIE. History of the story in the kindergarten. *Kind. R.* 21:85-91. (O. '10.)
- Professor William James. *Lit. Digest* 41:384. (10 S. '10.)
- RAND, E. K. A symposium on the value of humanistic, particularly classical, studies: The classics and the new education. I, The classics in European education. *School R.* 18:441-59. (S. '10.)
- SHELDON, W. D. A neglected cause of retardation. *Educa. R.* 40:121-31. (S. '10.)

- SIES, R. W. Scientific methods in education. *Educa. R.* 40:157-72. (S. '10.)
- SMITH, T. F. A. German schools—A national system. *School W.* 13:325-29. (S. '10.)
- TANNER, AMY E. The child as the center of correlation in the kindergarten. *Kind. R.* 31:75-80. (O. '10.)
- Temptations of a college president. *Educa. R.* 40:113-20. (S. '10.)
- (The) third international congress of school hygiene. *School W.* 12:329-31. (S. '10.)
- VATTIER, G. Experimental pedagogy in France. *Journ. of Educa. Psychol.* 1:389-403. (S. '10.)

